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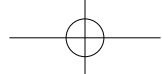


1908-2008

臺博一百

*A Centennial
Celebration of the
National Taiwan
Museum*





一個世紀的 博物館教育

A Century of Museum Education¹

George E. Hein Professor Emeritus, Lesley University



The National Taiwan Museum celebrates its centennial near the beginning of the 21st Century. That event provides an opportunity to look back and consider the history of public museums for the past 100 years and to reflect on the longer history of these unique institutions. Public museums arose approximately 200 years ago, at the beginning of the 19th Century, mainly in Europe and the United States. Thus, a century marks half of the life span of museums. In Europe, the birth of nation states with its accompanying gradual shift in power from royalty, the church and entrenched guilds to elected representative governments, was coupled with a major social change: the recognition that governments had responsibilities for a range of services. Schools and museums were prominent among new institutions created to serve a public need.



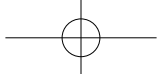
But, while public schools and public museums clearly arose during this time of reform and revolution, neither institution achieved its full and stature until almost 100 years later, about the time that the National Taiwan Museum was founded. For much of the 19th Century, public schools were limited in their impact because a majority of children had neither time nor means to attend them; economic necessity and traditional cultural attitudes determined that they work. And museums,

struggling for public support that never achieved the level provided to schools, also remained marginal to the larger social goals acknowledged by republican governments.

In the 20th Century, public schools and museums became entrenched as major forces in shaping society. In Taiwan, not only does the National Taiwan Museum celebrate its centennial, but the island now has three museum studies programs, and in this centennial year 2008, Fu Jen University, in cooperation with the National Taiwan Museum and other agencies, organized a major conference celebrating the work of an emerging profession of museum education.

Public Schools and Museums

Public museums are by their nature educational institutions. An institution can only be described as a museum if people come to visit exhibitions, participate in programs and experience the materials on display, no matter how much conservation and preservation it carries out. And exhibitions always have a message; a story they intend to tell for the education and entertainment of visitors. As the most recent definition of a museum adopted by the International Council of Museums states, "study, education and entertainment" are integral to the definition of a museum.



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A museum is a non-profit making, permanent institution in the service of society and of its development, and open to the public, which acquires, conserves, re searches, communicates and exhibits, for purposes of study, education and enjoyment, material evidence of people and their environment.²

In the United States, from its early days museums were one component of the political movement to create a new society by developing a strong educational system that would support an informed citizenry. Thomas Jefferson, the towering intellectual figure among the country's founding fathers, considered his work to establish educational institutions as his most significant contribution to the new republic. He was particularly proud that he had established the University of Virginia and particularly disappointed that he could not persuade the Virginia legislature to enact a law to assure a strong public school system. He believed that public education for all citizens was one essential component of a larger political structure to avoid the emergence of a hereditary aristocracy of wealth. In a famous letter to his long time friend

John Adams, he describes what he proposed as follows:

... a bill for the more general diffusion of learning. This proposed to divide every county into wards of five or six miles square; . . . to establish in each ward a free school for reading, writing and common arithmetic; to provide for the annual selection of the best [students] from these schools, who might receive, at the public expense, a higher degree of education at a district school; and from these district schools to select a certain number of the most promising subjects, to be completed at an University, where all the useful sciences should be taught.³

At the same time, Jefferson's close friend and fellow patriot, Charles Willson Peale, established the first major museum in the United States, because he, too, believed in the necessity of education for all.

In a country whose institutions all depend upon the virtue of the people, which in its turn is secure only as they are well informed, the promotion of knowledge is the first of duties.⁴

¹ This article is based on lectures delivered in Taiwan, January 11 and 12, 2008.

² ICOM web site, http://icom.museum/hist_def_eng.html

³ Thomas Jefferson letter to John Adams, October 18, 1813. Lee, G. C. (1961), *Crusade Against Ignorance: Thomas Jefferson on Education*, New York: Teachers College Press. 160-167

⁴ Quoted in *Useful Knowledge in the New Republic* - C. W. Peale, <http://www.lewis-clark.org/content/content-channel.asp?ChannelID=376>

⁵ See, Cremin, L. A. (1961) *The Transformation of the School, Progressivism in American Education, 1876-1957*, New York: Alfred A. Knopf.

⁶ See, Dewey, J. (1929) *Experience and Nature, Second Edition*, Chicago: Open Court Publishing Company.

⁷ Dewey, J. (1916) *Democracy And Education*, New York: Macmillan.



A century later, when both schools and museums were well-established institutions, society was still struggling with wide gaps in wealth and less than adequate social justice for all. At the beginning of the 20th Century, the major educational issue was not whether public museums and schools might be the means for educating society but *how* they might carry out this task. The model embraced by both was the politically powerful conception of progressive education eloquently described and promulgated by John Dewey, America's leading philosopher.⁵

Dewey and Progressive Education

Dewey developed a philosophy based on two fundamental concepts. One was his faith in democracy and the need to strive for a better society, a society that improved the life chances for everyone and moved towards greater social justice. The other was a commitment to naturalism, to the concept that life as it is lived contains all that exists. He argued that there are no supernatural entities or ideal forms outside of our experience.⁶ These two pillars evolved into a philosophy usually described as "pragmatism" (Dewey preferred the term "instrumentalism") that determined Dewey's approach to education as well as to his social philosophy in general. The educational component became known as "progressive education." In *Democracy and Education*,⁷ one of his most significant works and the one in which he describes his educational views most fully, he uses the term "progressive" to describe the kind of society for which his educational method is required, namely a society that is not satisfied with the status quo but aims to progress towards better social conditions for all.

His educational ideas included a significant role for museums. In his description of an ideal school in *School and Society*, Dewey includes museums as an important component and says that school subjects, such as art, history and science should encompass:

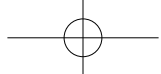
A living union of thought and the instrument of expression. This union is symbolized by

saying that in the ideal school the [curriculum] work might be considered to be that of the shops, passed through the alembic of library and museum into action again.⁸

Dewey also practiced what he preached: his own experimental school at the University of Chicago included much practical work. Children tended gardens, cooked, did woodwork and metal work (all these activities were carried out by both boys and girls) and visited museums regularly. Describing student time at the laboratory school, Ida Depencier recounts,

During 1896-97, an hour and a half was set aside on Monday mornings for trips to the Field Columbian Museum. . . The younger





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children had a plot of ground. . . Older children went to the University laboratories to see such instruments as the interferometer and spectroscope. There were also longer trips.⁹

The museum world responded to the concepts of progressive education and embraced its efforts to educate through combining rich, practical experiences with reflection within the museum. Two influential museum educators, Anna Billings Gallup, the founding director of the Brooklyn Children's Museum and Louise Connolly, the head of education at the Newark Museum, proudly acknowledged that their museum work was based on principles of the progressive education movement.¹⁰ Connolly

described her conception of museum education in detail.

Then came the modern movement in pedagogy. It took off the shackles of dead forms that had trammelled the feet of teachers, and bade them walk. Some do not know to this day that their feet are free; but many are treading with firm step the uphill path that leads to high achievement just because they know enough to study the child as well as the subject. So we take out children to see the real thing, whatever that may be, and then to the museum where hand specimens of it may be found to remind us of it, and then we reduce our knowledge of it to language, and, finally, we look into books to be reminded by language of our experience-gained knowledge. The whole

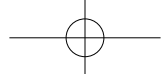
⁸ Dewey, J. (1900) *The School and Society*. Chicago: U. of Chicago Press, p. 89. (An alembic is a primitive distillation apparatus.)

⁹ Depencier, I. B. (1967) *The History of the Laboratory School*, Chicago: Quadrangle Books, (p.33)

¹⁰ See, Hein, G. E. (2006), *Progressive education and museum education*: Anna Billings Gallup and Louise Connolly, *J. Museum Education*, 31[3] 161-174.

¹¹ Connolly, L. (1914) *The Educational Value of Museums* Newark, N.J.: The Library and the Museum), pp. 6-8.





¹² Hausen, A. (2002) "Aesthetic Thought, Critical Thinking and Transfer," *Arts and Learning Journal*, Vol. 18[1], 99-131. http://www.vue.org/download/Aesthetic_thought.pdf

¹³ Humphrey, T. And J. Gutwill (2006) *Fostering Active, Prolonged Engagement*, San Francisco, CA: The Exploratorium.

¹⁴ Liu, Wan Chen (2007) *Museums as Theatre*, Taipei: Artists Publishing.

*city administration in any progressive city is a museum. A class reciting upon the function of courts has seen a court in session. . . . A class in United States history gathers about the statue of Washington. Rivers are studied on a river's brink. So through their own observation of the response given to their efforts and through the diffusion of ideas as to how the people should be taught, museums have been slowly led to the revolution which is now going on in their conduct.*¹¹

This brief outline of the parallel history of museums and schools suggests the potential power of museums as educational institutions. Public education and public museums were created to facilitate the education of entire populations so they could participate fully in democratic societies. Progressive education was conceived as a way—through education—that societies could progress towards more social justice.

Educational Theory

The pedagogic principles progressive education have value in themselves, they are not only a means to a social end; they also put into practice the best knowledge we have of how people learn and make sense of the world. The past 100 years have not only witnessed the growth of museums and schools, but have also been a period in which enormous progress has been made in our understanding of how people learn. This was the century of child development, of recognition through research that children build their understanding of the world and their capacity to reason by actively engaging their minds, by manipulating the natural world and, most importantly, by making meaning through the use of language and their interaction with others. Adults continue to expand their knowledge of the world in similar ways. The seminal work of Piaget, Vygotsky, Bruner and many others has taught us a great deal about mental development, and it is striking to realize how wonderfully the kinds of activities that are characteristic of museum education fit the pedagogy that derives from this research.

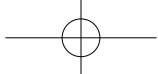
—We learn best when we start with *experiences*, with objects and activities, not with symbols or words. Museums are institutions that are naturally rich in objects. And with the advent of interactive exhibits, they have become places where interaction, not just observation, has become common.

—We learn best when we are encouraged to make connections, to use our imaginations, to apply metaphors and comparisons. Exhibitions in Museums are based on the principle of making connections between objects. Art museum curators think hard about the placement of paintings to encourage comparisons; natural history museums, through dioramas and habitat exhibits place objects in contexts; and history museums make every effort to associate their material with the social, cultural and political milieu relevant to their subjects.

—We learn best when we can discuss with peers and teachers what we experience. Increasingly, museum educational programs provide opportunities for participants to share experiences, explore their own ideas with others and build their capacity to reflect on what they see in an exhibition. A popular art museum educational approach, Visual Thinking Strategies, developed by Abigail Hausen and Philip Yenawine, is described as follows:

*[T]he curriculum's three foundation questions prompt beginner viewers to reason about evidence by asking "What is going on here?"; "What do you see that makes you say that?"; and "What more can you find?" These questions promote extended, careful and intricate observations. They focus learners, allow choice, require learners to be active, call for reflection, invite many kinds of responses as well as change in responses, allow group participation, and elicit responses which provide a source of information and learning for further discussion.*¹²

Similarly, in a study at a science museum examining ways for how visitors engage more deeply with interactive exhibitions, researchers found that they were successful when they



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provided opportunities for visitors to pursue their own questions and concepts, rather than using the equipment provided to demonstrate principles chosen by the exhibition developers.

[An] important goal of the project [is] empowering visitors to pose and pursue their own questions at the exhibits . . . [Active Prolonged Engagement] exhibits were created to encourage visitors to explore phenomena in their own ways, answering their own questions, rather than turning to the authority in the label.¹³

What was called progressive education early in the 20th Century is now usually described as “constructivism.” The principles of progressive education, are, and have been, readily utilized in museums. Both contemporary research on visitors and the several books of the past decade that have described learning in museums emphasize that visitors learn by doing, that the cultural backgrounds of visitors are significant contributors to learning (or not learning!) and that the social aspects of their visits are important.

Constructivism

Besides advocating a learning theory that recognizes the mind as an active force in education—a view that today has few opponents—proponents of constructivism go further and also argue that learners make meanings as they learn. “Meaning” does not exist as metaphysical entity, something that has standing separate from those who learn, but each learner creates it as he or she goes through the experience of learning, of engaging with the phenomena of experiences. And, because each learner is not an isolated individual but enmeshed within a social, cultural and historical context of family, peers, and friends, the meanings we attribute to our experience generally fall into patterns determined by our personal and social history. Museum learning involves imagination, engagement and personal meaning making, similar to the response of audiences to cultural

events. A recent Taiwanese publication by Professor Wanchen Liu that emphasizes the educational role of museums conceptualizes museum as “theatre.”¹⁴

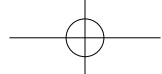
In the examples of constructivist museum programs described above, personal meaning making is emphasized. Hausen comments that her program calls for individual answers to the generic questions and leads viewers not to finding the meaning of any picture, but builds their visual thinking skills, their ability to focus on a painting and find elements that are of interest to them. Humphrey and Gutwill stress that their research was designed to increase the possibility that visitors would ask and pursue their own questions and reach their own conclusions, not carry out experiments that were intended to demonstrate a science principle determined by the exhibition developers.

A similar outcome was noted in the evaluation of a science exhibition at the Boston Museum of Science. Some young enterprising visitors used an exhibit that was designed to allow visitors to recreate Galileo's experiments on falling bodies for a different purpose, to test their own reaction time (to see if they could catch the falling objects before they hit the ground). The head of exhibits at the museum was delighted to note this inventive use of his exhibit.¹⁵

The social responsibility of museums

Constructivism calls for a specific kind of pedagogy, but if we connect it back to its





roots in progressive education we also need to acknowledge, as was mentioned earlier in this article, that it is based on a particular social concept. Education should be a tool for achieving a better world; a world in which the economic differences between rich and poor are minimized and social justice for all is the goal.

This socio-political component of constructivism is gradually emerging as an explicit goal for many museums. Janes and Conaty have recently published a collection of case studies of museums that have taken seriously their social responsibility to strive for a better world and build “social capital” by addressing issues of “social equity, civic engagement, and the meaning the institution has for its community.”¹⁶ The proceedings of the 2006 ICOM/INTERCOM Symposium held in Taiwan, emphasized the social responsibility of museums.¹⁷

Museums can accept this responsibility in various ways:

—Mount exhibitions on socially significant issues. For example, concern for the environment has resulted in a worldwide effort by many museums, including the National Taiwan Museum, to mount exhibitions about the threatened natural environment, climate change and the need for conservation.

—Challenge the traditions of exhibition presentation, as in the work of artist Fred Wilson, whose provocative exhibitions ask both why museums exhibit some objects and not others and how they chose to describe their presentations.¹⁸ He points out the inherent racist attributes of many art and history collections. For example, “Mining the Museum,” and exhibition based on material he found in storage at the Maryland Historical Society includes a display case containing slave shackles along with silver candlesticks and coffee sets. Slaves made all the objects and all have been collected by the museum, although only the “fine” objects had been displayed previously.

—Foster conversations about controversial topics that relate to their own mission, such as the “kitchen conversations” at the Lower East Side Tenement Museum in New York. This museum, which illustrates the immigrant experience in New York in the early

years of the 20th Century, has instituted a series of conversations to discuss the current controversies in the United States concerning 21st Century immigration.¹⁹

—Declare themselves agents of social change, such as the Coalition of Sites of Conscience, who proclaim that its member museums are

*a network of historic site museums in many different parts of the world . . . We hold in common the belief that it is the obligation of historic sites to assist the public in drawing connections between the history of our site and its contemporary implications. We view stimulating dialogue on pressing social issues and promoting humanitarian and democratic values as a primary function.*²⁰

—Reach out to underrepresented or marginalized communities to help them to preserve their own cultures and allow that larger society to recognize their unique histories. An example of such work is the outreach activities at the National Taiwan Prehistoric Cultural Museum.

—Develop powerful experiences for visitors that challenge common assumptions about power in society, such as Dialogue in the Dark: An Exhibition to Discover the Unseen. This exhibition leads visitors through a series of settings—a park, a street scene, a reflective room a café, etc—all experienced in total darkness with a person who is blind as a guide. The guide has no difficulty with the surroundings, while visitors struggle in the (for them) unaccustomed setting. The effect is powerful and raises fundamental questions about human interactions.²¹

The examples above illustrative diverse efforts by museums to build on a century of practice and research that enable them to develop rewarding exhibitions and programs for visitors, all intended to serve both a pedagogic and a social function. We can look forward to another century of continuation of this important work at the National Taiwan Museum as well as in the entire museum community.

¹⁵ Bailey, E. B., K. Bronnenkant, J. Kelley and G. E. Hein (1998) “Visitor Behavior at a Constructivist Exhibition: Evaluating Investigate! at Boston’s Museum of Science,” in Dufresne-Tassé, C. editor, *Évaluation et éducation muséal: nouvelles tendances*, Montreal: ICOM/CECA, pp. 149-168. <http://www.mos.org/exhibitdevelopment/pdf/InvestigateEvaluation.pdf>

¹⁶ Janes R. R. and G. T. Conaty (2005) *Looking Reality in the Eye: Museums and Social Responsibility*, Calgary, Alberta, Canada: University of Calgary Press.

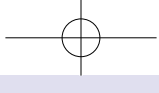
¹⁷ ICOM/INTERCOM (2006) *New Roles and Missions of Museums, Taipei*: ICOM/INTERCOM, Council for Cultural Affairs, Taiwan.

¹⁸ See Stein, J. E. (2003), <http://slought.org/files/downloads/publications/salons/1083.pdf>

¹⁹ Abrams, R. J. (2007) *Kitchen Conversations: Democracy in Action at the Lower East Side Tenement Museum*, *The Public Historian*, 29 [1]: 59-76.

²⁰ www.sitesofconscience.org

²¹ http://www.dialog-im-dunkeln.de/home_en.htm



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國立臺灣博物館將在21世紀初慶祝百歲生日。在這個時機，剛好可用來回顧公立博物館的歷史，以及探討博物館這種獨特機構更悠久的歷史。公立博物館約在200年前(約19世紀初)出現於歐洲和美國，所以一百年在博物館的整個歷史中，佔了一半的時間。在歐洲，隨著國家的主權由皇家貴族、教會與屹立不搖的工會，逐漸轉移到民選的政府後，國民國家(nation state)隨之興起，社會也發生了重大的變革：政府有責任提供各項服務，而學校與博物館是這些新服務機構中最重要的。

公立學校與圖書館很明顯的在這個重整與革命的時代出現，但是這兩種機構要到將近一百年之後才發展完備、發揮全力，國立臺灣博物館也在那個時代誕生。在19世紀，公立學校的影響力有限，因為大部分的兒童並沒有時間上學，也沒有必要上學。經濟狀況不佳以及傳統上對於學習上的態度，影響了學校的功用。而博物館掙得的支持還不及學校的多。當時的公民政府的社會施政目標中，博物館也被擱在一邊。

到了20世紀，公立學校和博物館成為形塑社會的基礎建設。在臺灣，不只是國立臺灣博物館慶祝百歲生日，其他三個博物館相關的研究會議，也將在2008年舉辦。輔仁大學、國立臺灣博物

館和其他單位已舉辦一項大型會議(編者按：2008年1月11日舉辦的「2008博物館教育理論與實務工作坊」)，討論博物館教育的專業議題。

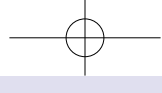
公立學校與博物館

公立博物館當然屬於教育機構。如果這個機構沒有人來參觀展覽、參與課程、親身體驗展出物品，那麼不論這個機構有多麼豐富的收藏，都不能稱為博物館。每個展覽都傳遞出一個訊息：訪客來博物館能夠受到教育、得到娛樂。國際博物館協會最近為博物館所下的定義中指出，博物館整合了「研究、教育與娛樂」：

博物館是非營利的永久性機構，對公眾開放，為社會與社會發展提供服務，從事蒐藏、保存、研究、交流與展示的工作，而目的是研究、教育與娛樂，同時也為人類與環境保存物質證據。

在美國早期，發展健全的教育系統使得公民能快速得到知識，進而產生了政治運動，而博物館成為這波運動的產物之一。在美國的開國元勳中，傑佛遜(Thomas Jefferson)是最富智識的，他對新共和國最重要的貢獻是設立了許多教育機構。他特別自豪的功績是設立了維吉尼亞大





學，而最失望的是無法說服維吉尼亞州議會立法確保有完善的公立學校系統。他相信對於人口眾多的政治結構體而言，所有公民的公眾教育是不可或缺的，因為這樣才能免於特權階級代代累積財富。在他給一生好友亞當斯(John Adams)的一封信著名的信中，提到自己的計劃：

…讓教育更普及的方案，在這個方案中，每個郡區分成五或六平方英里的區域，每個區域中都有免費的學校，教授閱讀、寫作與基礎的算數。每年從這些學校中選出最優秀的學生，政府資助他們在轄區中受更高等的教育。而這些轄區要選出一些最有前途的學生，能夠在大學中完成實用的科學教育。

同時，傑佛遜的好友(也是開國元勳)皮爾(Charles Willson Peale)，建立了美國第一座大型博物館，因為他也認為教育對所有人而言，是必要的。他說：

國家的機構需要人民良好的德性來支持，因此人民必須有教養，而國家主要的責任之一，就是推廣知識。

百年之後，學校與博物館都已經發展完善，但是社會上的貧富差距仍大，社會正義並沒有完全彰顯。20世紀初，主要的教育議題並非「公立學校與博物館是否對社會教育有意義」，而是「它們如何才能發揮社會作用」。這項教育革新的概念在政治上很有力量，而美國首屈一指的哲學家杜威(John Dewey)明確的說明了這一點，並且大力提倡。

杜威與教育革新

杜威的哲學有兩個基礎。首先，他相信民主，而社會需要努力，才能改善人民生活，正義公平才得以彰顯。第二，他支持自然主義，也就是生命在活著的時候才存在，他不認為在經驗之外具有超自然的實體與理念中的形體。這兩個支柱造就了通常稱為「實用主義」的哲學(杜威本人偏好使用「工具主義」這個詞)。實用主義決定了杜威對於教育和社會哲學的看法，而產生的理念就是「進步教育」(progressive education)。他在《民主與教育》(Democracy and Education)這本重要著作中，幾乎完整闡述了自己的教育理念。他用「進步」這個詞來形容能夠執行他的教育方法的社會，也就是說，這個社會不會滿足於現況，而會不斷求進步。

在他的教育理念中，博物館佔有重要地位。他在《學校與社會》(School and Society)中指出，博物館是教育中重要的一環，需要包含學校教育的主題，例如藝術、歷史與科學。他指出：

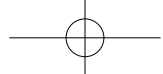
(博物館與學校是)結合思想與展覽的機構。一言以蔽之，理想學校中的課程能夠讓圖書館與博物館的精華典藏再次活躍起來。

杜威也身體力行，他在芝加哥大學成立了實驗學校，推動許多工作。學校中的男女學生都要去照顧花園、烹煮食物、從事木工與金工，並且定期造訪博物館。當年實驗學校的學生迪潘瑟(Ida Edpencier)回憶道：

1896~1997年間，每週一早上都要空出一個半小時，參訪哥倫比亞費氏博物館(Field Columbian Museum)。年幼的學生在一樓有別的計劃，年長的學生會前往大學的實驗室，參觀干涉儀和分光器之類的儀器操作。有的時候也有長時間的參觀。

各個博物館回應進步教育的概念，並且推出豐富、能親身操作的經驗，作為回應。兩位深具影響力的博物館教育者自豪地認為自己的博物館是根據進步教育的概念而運作的，他們分別是布魯克林兒童博物館(Brooklyn Children's Museum)的首任館長加盧普(Anna Billings Gallup)，以及紐瓦克博物館(Newark Museum)的教育主管康諾利(Louise Connolly)。康諾利仔細道出她對於博物館教育的理念：

現代教育運動出現，解開了束縛教師的僵硬模式，讓教師往前邁進。那時有些教師並不知道自己已經自由了，但是許多教師都堅定地邁開步伐，奮力取得更高的成就，因為他們有足夠的知識去了解學生與所教授的主題。因此我們把兒童帶出教室，讓他們看看任何能體驗到真實的事物，也到博物館實際觸摸各式標本。然後我們把知識簡化成語言，最後我們閱讀，經由語言讓我們回憶起實際的體驗而得到的知識。一個前進的城市機構就是一座博物館；而說明法庭的課程最好就是親臨法庭…有關美國歷史的課程就要到華盛頓雕像旁邊進行；研究河流就到河邊。博物館工作所得到的反應，以及教育想法的交流，使得博物館的工作逐漸變化。



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概觀博物館與學校發展的歷史，可以看出博物館是深具潛力的教育機構。公眾教育與公立博物館是為了促進全體民眾的教育而建立的，因此能讓民眾完全融入民主社會。進步教育被認為是經由教育而讓社會更公平的方法。

教育的理論

進步教育的教學理論自有其價值，並不只是社會的結果，同時運用到人類如何學習與感知世界的知識。過去一百年來，不只博物館與學校有所成長，我們對於人類學習的方式，也有長足的了解。在上個世紀，我們經由研究，知道了兒童如何經由操作週邊的事物、如何運用語言與他人溝通，進而了解週遭的世界，整理心智而得到理性思考的能力。成人也以類似的方式得到知識。皮亞傑(Piaget)、維果斯基(Vygotsky)與布魯那(Bruner)等人的開創性研究，讓我們更清楚心智發展的過程。而博物館的各種教育活動，能夠與依照這些研究發展出來的教學法，密切的配合。

—學習如果從經驗開始，效果最好：物件與活動勝過符號與文字。博物館具有許多物件，而且有能與訪客互動的展覽，因此成為能夠跳脫觀察、直接互動的場所。

—如果能運用想像、比喻與比較，建立起連結，那麼學習效果會比較好。博物館的展出，基本概念就是將不同的物件連結起來，藝術博物館的策展人則努力思考讓不同的畫作建立比較；自然史博物館用生態實景手法，還原展品原來所處

的情境；歷史博物館則讓物件與相關的社會、文化、政治環境產生連結。

—如果能與教師及同儕討論自己的經驗，學習效果會比較好。博物館的展出能讓參觀者分享經驗，與他人交流想法，建立參觀展覽之後反思的能力。由哈森(Abigail Hausen)與葉納溫(Philip Yenawine)所發展的〈視覺思考策略〉(Visual Thinking Strategies)，是一個受歡迎的藝術博物館教育方法，內容概述如下：

這個教育方法中提出三個問題：「這裡發生什麼事？」、「看到了什麼而能讓你這樣說？」以及「還有其他的嗎？」，能促使入門初學者的參觀思考展出品，進行仔細而深入的觀察。這三個問題能讓初學者集中注意力、能夠有選擇的機會，同時也要求初學者主動的表達意見，引發各種回應與並且改變回應，讓集體的參與及回應能夠成為資訊的來源，並且能有進一步的討論。

而科學博物館的研究，則檢視了讓參觀者深入與展覽品互動的方法。研究者發現如果能讓參觀者有機會提出自己的問題與看法，而不只是利用策展者設計的展示裝置來驗證學理，會得到更多心得。

展覽計劃的重要目的是讓參觀者能夠提出自己對於展覽的問題……(主動長時間的接觸)展覽能夠鼓勵參觀者用自己的方式探索現象、回答問題，而不是看標示上的權威解說。



當時在20世紀初所說的進步教育，現在通稱為「建構主義」，其一貫的主張都有運用到博物館。目前當代的觀眾研究以及其過去十年來數本描述博物館學習的著作，都強調參觀者要從做中學，參觀者的文化背景對於學習(或不學習)舉足輕重，而他們的社會觀點也很重要。

建構主義

建構主義認為心智是學習的主動力量(這一點當今少有反對者)，同時也指出學習者藉由學習而產生意義。這裡的「意義」並不是與學習無關的抽象名詞，而是學習者經由學習、體驗而產生經驗的現象。由於學習者並不是孤立的個體，會陷入家人、同儕與朋友的社會、文化與歷史脈絡中，因此我們由經驗而產生的意義，通常落入個人與所處社會的過往而塑成的模式中。博物館的學習、想像、操作與個人意義的建立有關，這和觀眾參加文化活動時的反應很類似。臺灣的劉婉珍教授在最近出版的專著中強調，博物館的教育角色是讓博物館有著「劇場」的概念。

上面提到的建構式主義博物館概念中，強調個人產生意義的過程。哈森認為她的活動能夠吸引參觀者回答一般性的問題。他們不是去找出畫作的意義，而是建立自己對於視覺思考的技術，集

中在畫作上的能力，以及從畫作發掘有趣的元素。杭普瑞(Humphrey)和加特威(Gutwill)強調他們的研究就是增加參觀者提問與追求解答的可能性，最後得到自己的答案，而非策展者想要驗證科學答案的實驗。

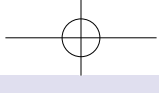
波士頓博物館的科學展覽在接受評量時，也得到類似的結果。有些年輕進取的參觀者，利用原為展示伽利略自由落體實驗的展示裝置，以自己的方式自娛(看看能否在落體抵達地面前接起來)，而策展者很高興指出這個展覽能有這樣創意的使用方式。

博物館的社會責任

建構主義需要特殊的教學方式，不過如果我們回頭看看其根源，就必須了解「進步教育」如同前面所提到的，是建立在特別的社會概念上。教育是社會進步的工具，其目標是拉近貧富差距，達成社會正義。

建構主義中社會與政治的成分，現在逐漸成為許多博物館明確的目標。詹姆斯(Janes)與康納(Conaty)提最近發表了一連串博物館的個案研究，其中指出這些博物館看重自身的社會責任，努力改進社會，透過提出「社會公平、公民參與，及身為社群機構的意義」等議題，以建立「社





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會資本」。2006年在臺灣舉辦的ICOM/INTERCOM國際博物館管理委員會臺北研討會中，特別強調博物館的責任。

博物館能以數種方式完成這些責任：

—**針對社會重要議題舉辦展覽。**例如環境議題，這讓包括國立臺灣博物館在內的各國許多博物館，策劃環境威脅、氣候變遷與保育需求的展覽。

—**挑戰傳統的展示手法。**威爾森(Fred Wilson)提倡策展都要問兩個問題：為什麼有些東西展出、有些卻不？還有如何決定這些展出品呈現的方式？他指出根深蒂固的種族主義者有許多藝術與歷史收藏品。例如「探索博物館」的展示物件是他在馬里蘭歷史協會發現一些收藏品，其中包括一只展示櫃內陳列的奴隸的腳鍊、銀燭臺和咖啡杯組。這些都是奴隸作的，且都由博物館收藏，雖然其中只有「精緻」的物件曾經展出過。

—**促進與博物館使命相關的，爭議性主題之間的對話。**例如紐約的Lower East Side Tenement博物館舉辦的「廚房對話」。這座博物館主要展示20世紀紐約早期的移民生活，因此著手辦理一系列的活動，討論美國21世紀的移民問題。

讓自身成為改變社會的機構，例如Coalition of Sites of Conscience宣稱旗下的博物館是：

世界各地歷史遺址博物館組成的網絡...我們都相信歷史遺址有義務幫助公眾，讓史蹟與其當代的意涵建立連結。我們最主要的工作，是激發社會議題的對話，促人道與民主價值。

—**接觸到沒有發聲或是被排擠到邊緣的社群，保存他們的文化，並讓廣大的社群能夠了解他們獨特的歷史。**例如國立臺灣史前文化博物館進行的培力與連接—多元族群文化教育活動。

—**發展深刻的經驗，讓參觀者改變一般社會上根深蒂固的觀念。**例如「黑暗中的對話：發現無法看見時的世界」這項展覽中，參觀者隨著目盲的引導者，在完全的黑暗中，體驗一連串的場景，例如公園、街道、餐廳等。盲眼的引導者行動沒有困難，而參觀者則受困於這不熟悉的環境。這種展覽成效卓著，讓人重新思考人類互動的基本問題。

以上的例子描繪出百年來博物館在運作與研究上所作的各種努力，讓博物館能夠發展出對於參觀者有益的展覽與活動，以發揮博物館的教育與社會功能。我們可以期待在下一個世紀，國立臺灣博物館和其他所有的博物館社群，能夠持續這項重要的工作。

