

WHAT DO THE ARTS TEACH?

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Low spending on the arts in schools indicates the low value placed on them. Yet the arts teach children how to exercise judgement and cope with the unexpected; they also make an unquantifiable contribution to developing understanding and enriching lives.

In the opening page of Charles Dickens' *Hard Times* Thomas Gradgrind offers advice on educational policy to a schoolmaster:

'Now, what I want is Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else, and root out everything else. You can only form the minds of reasoning animals upon Facts; nothing else will ever be of service to them. This is the principle on which I bring up my own children, and it is the principle on which I bring up these children. Stick to the Facts, sir!'

The policy Gradgrind advanced in 1854 is not appropriate today. Contemporary society is interested in loftier, more elusive goals whose attainment is difficult to measure. Students must not only know the facts, but understand them and be able to think in imaginative, complex and critical ways. The world today requires people who can think on their own, who can

raise telling questions and solve puzzling problems. The world outside school is riddled with unpredictable contingencies - there are no certainties. These conditions have implications for what and how we teach because that has something to do with the kind of minds children in future will be able to create. Experience is the primary medium of education and educational policies affect the kind of mental skills, forms of understanding, and types of literacy they will have an opportunity to acquire. In the curricula offered by schools, matters of content inclusion, content exclusion and method are important. Since time is a precious resource, how to allocate time to what we teach presents both an opportunity for students and an opportunity cost. Policies about content, form, and goals of educational programmes are of major importance in shaping what and how children think.

Nice but not necessary

The arts, in so far as our schools are concerned, do not represent high-status knowledge. For more than a few in the policy world they have nothing at all to do with knowledge. The arts traffic in emotion. They are largely visceral. They are thought to have little to do with abstract forms of thinking or with the kind of reasoning that abstraction makes possible. Since the school should give its garlands to the cultivation of the intellect, they are a kind of divertimento, nice but not necessary.

One of the most telling indicators of the arts' position in schools is the amount of financial support they receive. According to a 1996 Office of Standards in Education (Ofsted) report, the range of expenditure in 1995/6 for visual arts education in secondary schools per child per year was from 70p to £8, with a median of £2.88 per child per year. How shall we respond? Are the arts void of abstraction? Are they non-intellectual? Do they really inform? Are they practical?

This lecture will explore what the arts teach and reveal the kind of thinking the arts demand. However, one important caveat pertains to the quality of teaching: the arts can be as badly taught as any field of study but my comments are predicated on the assumption that they are well taught. One other qualification: because I was in another life a painter and a teacher of art, most of the examples are taken from the visual arts; however, the same

issues and processes do appear in the other arts as well.

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Art's lessons

Work in the arts teaches children that sensitive attention to relationships is critical for creating a coherent and satisfying piece of work. The way qualities relate to each other - whether in sight or sound, through prose or poetry, whether in the choreographed movement of dance or in an actor's lines and movements - is critical. Decisions about these relationships cannot be reduced to rule; they depend upon somatic experience. This is not limited to the arts. To the extent to which the practice of science is an art, it too requires that judgements about the rightness of an idea or the beauty of a theory be determined by somatic experience. In the arts the somatic experience of relationships is a central basis for making judgements.

What is striking is that so little in the school curriculum affords children the opportunity to make such judgements. The curriculum is heavily weighted towards subject matter that gives students the illusion that rightness always depends upon fealty to rule. Spelling and arithmetic are largely mimetic or rule-abiding. Not so the arts. They are most conspicuous in their insistence that relationships are central and that good relationships are achieved when mind works in the service of feeling. This is a cognitive use of the emotions, where judgement rather than rule prevails.

Celebration of diversity

The arts teach children that problems can have more than one solution and that questions can have more than one answer. The arts celebrate diversity. While the teacher of spelling is not particularly interested in ingenuity of response from students, the arts teacher seeks it. The arts celebrate multiple conceptions of virtue. They teach that there are many ways to see and interpret the world and that people can look through more than one window. Furthermore, this lesson is seldom taught in schools.

The multiple-choice test is not objective because of the way the test items

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are selected; it is objective due to the way it is scored and because it makes no allowance for the exercise of judgement. Reflect for a moment on the tacit lessons of such tests. The possibility of multiple ways of addressing and solving a problem is one way in which a child's individual signature can be affixed to the work. It is ironic that at a time when educational reform pushes towards standardised assessment, uniformity of programme and homogeneity of aims, a field that provides balance to such priorities should be regarded as marginal. Surely, the greater the pressure to standardise, the greater the need for the arts.

The arts teach children that in complex forms of problem-solving purposes are seldom fixed but change with circumstance and opportunity. In so-called rational approaches to problem-solving the standard paradigm is clear goals and objectives; means can be designed to attain those goals, and evaluation procedures can be used to determine if the goals and objectives have been reached. If not, more effective means can be used to recycle the process.

Yet, this model is not the way life works and it's certainly not the way work in the arts proceeds. Learning in the arts requires an ability to surrender to the unanticipated possibilities of the work as it unfolds. At its best, work in the arts is not a monologue but a conversation punctuated with all of the surprises and uncertainty that really stimulating conversation makes possible. In the arts one looks for surprise that redefines goals; purposes are held flexibly. The aim is not impressing into a material what you already know but rather discovering what you don't.

We know more than we can tell

The arts teach children that, despite cultural bias, neither words in their literal form nor numbers as quantifiers of the world exhaust what we can know. Our linguistic capacities do not define the limits of our cognition. As Michael Polanyi says, we know more than we can tell. For students, and for those who shape educational policy, this lesson is important. The reduction of knowing to the quantifiable and the literal so that certain verification procedures can be employed is too high a price to pay for conceptualising the conditions of knowledge. The capacity of the arts, for example, to promote

empathy as a means of understanding what others have undergone relies on the form of the work to evoke in the competent reader a certain quality of life that eludes the stripped-down features of the literal.

Empathetic participation in the lives of others is not the only contribution the arts make to the enlargement of understanding. An ability to create forms that make such understanding possible in the first place attests to the human capacity and need to invent ways through which meaning can be pursued, stabilised and made public. The arts, like the sciences, help us grasp the ways in which we share with each other the reaches of our imagination and the depth of our feeling. What we share are the distinctive qualities of experience that a work of art itself makes possible. The delicate contours of a Tang dynasty vessel as well as the complex harmonies of a late Beethoven quartet are knowable whether you live in London, Beijing or Chicago, as long as you know how to enquire into them. Learning how to conduct such enquiries is a part of what it means to have an art education.

If the arts are thought of as carriers of meaning, and if the concept of literacy is extended to mean the ability to encode or decode meaning within forms in which meaning can appear, then an education in the arts is one way to become literate. Broadened further, an education in the arts, like one in the sciences, is a means through which students acquire multiple forms of literacy, thus opening up meanings that different forms of representation make possible.

Subtleties and nuances

The arts teach students that small differences can have large effects. They traffic in subtleties. Paying attention to subtleties is not typically a dominant mode of perception in the ordinary course of life. Typically, we see in order to recognise rather than to explore visually the subtle nuances of a visual field. How many people have really seen the facade of their own house? One test is to try to draw it. The tendency is to look at a house in order to know if you have arrived home, or to decide if it needs to be painted, or to determine if anyone's there. Seeing its visual qualities and their relationships is much less common. Yet learning to see is precisely what the arts teach. They invite students to explore the auditory contours of a musical performance, the move-

ments of a dance, the proportions of an architectural form so they can be experienced as art forms. Seeing in such situations is in the service of feeling.

This scope of aesthetic experience is not limited to the fine arts. City streets, cloud formations, billboard posters ripped from the walls of a building and displaying the luscious surface of a collage are also candidates for seeing in the service of feeling. There is, however, a difference between such forms and what are considered works of art. Works of art participate in a tradition, invested with intention by their creators and as part of a social context, they have been influenced by their history. Anything can be seen from a purely formal perspective. The perception of art works requires more. The arts teach students to think through and within a material. All art forms employ some vehicle through which images become real - music has patterned sound, dance has the expressive movement of a dancer, painting has a visual form on a canvas. Each art form imposes on its creators a set of constraints; they make certain demands. They also provide an array of affordances and offer distinctive opportunities but to realise such opportunities the child must be able to convert a material into a medium. This conversion occurs when the material mediates what the child wishes to achieve, and for this to occur the child must learn to think within the affordances and constraints of the material and to employ techniques to make possible that conversion of material to medium.

Remaking ourselves through art

This process of conversion occurs not only within the material but also within the child. The phrase 'work of art' refers both to the task of arting and to the results of such work. The term 'work' is both a noun and a verb, an activity whose consequences live not only in the object but in the maker. The work of art is a process and a product through which we remake ourselves.

How does this remaking occur? First, works of art can defamiliarise aspects of the world by recontextualisation. Duchamp's urinal, titled *The*

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fountain and placed in a museum, represents an invitation to see in a new way what our customary form of sight has blinded us to. Duchamp's invitation illuminates not only the object but our assumptions about art. Defamiliarisation and new juxtaposition challenge our experience for they violate our expectations. They call attention not only to the work but to any aspect of the world we are able to re-see as a result.

Secondly, works of art focus our attention on what would normally go unseen. This calling of attention makes vivid new ways of seeing the world and, when the arts are well taught, illustrates to students new ways in which they themselves can reframe the world for perception. Although new theories in science also represent a reframing, there is an expectation of some correspondence between a scientific representation and the reality. In the arts the scope for a no-holds-barred imaginative reframing is not constrained by such expectations.

Talk about art makes special demands on those who speak about it. Think, for a moment, about what is required for anybody to describe the qualities of a trumpet solo by Miles Davis or the expressive character of a bronze sculpture by Barbara Hepworth. The task is not to replicate in language the qualities experienced. It is rather to imply, through language, qualities that are themselves ineffable, hence the trick is to say what cannot be said.

The value of articulation

Here, that most precious of linguistic capacities, metaphor, comes to the rescue. Metaphor adumbrates; it does not translate. When children are given the opportunity to describe and interpret what they see, when they are invited to disclose what a work helps them feel, they must reach into their poetic capacities to invent a language that will do the job. This emerges in the neologisms of toddler talk and appears in the vernacular poetry of slang. Criticism in the arts is not only a way of helping others see what they have missed; it is also a road to sight. The critical act, the task of trying to articulate what is seen, is also a way of discovering what is there.

Finally, the arts enable us to undergo qualities of experience available from no other sources, and through such experience to discover the range and variety of what we are capable of feeling. Some works of art have the

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capacity to put us into another world, and so stirring is the journey that we surrender to where the work takes us. Such experiences are not the common stock-in-trade of the average eight-year-old. As a former painting teacher once told me, great works of art require great audiences. Eight-year-olds typically are not yet great audiences, but we wish to help them to be. However they can be helped to acquire the forms of literacy that will give them access to such works and hence to the joy and delight they make possible.

The cognitive processes the arts require do not function independently; they interact. For example, a concern with nuance must be addressed at the same time as one is attending to matters of composition, purposes must be treated flexibly while one is attending to matters of technique, thought in language and image function simultaneously. Far from being simple, the creation of an image is a complex form of human achievement in which everything affects everything else. Such educational achievements take time. We are all too impatient about attaining the educational ends that really matter. The press for accountability typically pushes towards short-term goals. We are too eager to settle for what is quickly demonstrable. We need to learn how to take a longer-term view and to be held accountable for more than the merely measurable. The lessons the arts teach require time, attention and skilled teachers who know what they are after. They are after more than what can be displayed on the refrigerator door. When that image dominates the public's conception of what the arts are for, the arts will remain marginal - and when that image dominates the teaching of the arts, they should remain marginal.

The problem of transfer

Is the claim that art's lessons reshape the ways in which children address the arts, or is it wider still, that they reshape the way children address tasks and problems outside of the arts? Unfortunately, there is no solid evidence that children who work in the arts transfer the lessons they have learned to out-of

-domain tasks such as social problems, to mathematics and to the sciences, that they have a greater toleration for ambiguity in general, or that they become more cognitively flexible. You can hear such arguments from arts advocates but educational researchers have found such transfer is difficult to demonstrate.

At one level everything that is learned transfers but this is not what is meant by out-of-domain transfer. Out-of-domain transfer shows what students learn in the arts gives them a cognitive advantage on non-arts tasks. Some people claim there are 'mountains of evidence' to support the statement that such transfer occurs. In fact there is not enough evidence to write home about and certainly not enough on which to base educational policy. But there is little evidence that out-of-domain transfer occurs in other fields. There is no evidence that geometry makes someone logical in the practical affairs of life or that physics makes someone scientifically minded in non-scientific fields.

If evidence is so scant regarding the transfer value of the various subjects we teach, including the arts, why teach them? There are several ways to look at the question. Intuition might indicate learning the lessons the arts teach does transfer to non-art tasks but that our research efforts have been too crude and our assessment instruments too insensitive to detect them, that the problem resides with the research, not with the lessons. Currently, John Harland and Kay Kinder, with the help of the RSA and the NFER, are conducting such research. We eagerly await their results.

To ask whether or not lessons learned in the arts transfer to out-of-domain tasks is, perhaps, to ask the wrong question. What the arts provide in their own domain is of sufficient value that attention to them in school needs no extra-artistic justification. Alternatively, while there is little evidence to show that what students learn in the arts transfers to out-of-domain tasks, there is plenty of informal evidence that it transfers to in-domain tasks - that is, to situations outside schools which are similar to those encountered in school. Moreover, children who have learned to look for qualitative relationships in their own and others' art work are more likely to look for such relationships in the world around them than those who have not. All three above perspectives have merit.

Unique contribution of the arts

At the same time the arts ought to be prized for what they uniquely contribute to human experience. The way the arts move us and enlarge our understanding by virtue of what they make vivid, need not be justified by looking for their effects elsewhere. A preoccupation with the propaedeutic leads to a neglect of quality and value of the here and now. Writ large, such neglect is a neglect of life itself.

Regarding the transfer of art's lessons to in-domain tasks and situations raises an important point to be made. High-status subjects in our schools are both technical and highly specialised - advanced forms of mathematics and science, for example. Because they are specialised and technical their applicability to ordinary life outside of the school is limited. Attention to such fields, and indeed the requirement that they be studied by students who might pursue them in their future work, seems to be fully justified.

What about the others? The lessons the arts teach can find their application in life outside school virtually any time students opens their eyes. Technically esoteric fields do not have the same degree of utility. If they do not develop mental muscles or transfer to out-of-domain tasks and if the occasions for their application are so scarce, why are students forced to devote their time to them?

One answer is a covert but significant function of such fields is to sort students out. Those fields are believed to be tough, and since there is a conception of intelligence defined largely in terms of performance in tough subjects, performance in those subjects is used as proxies for intelligence. Such proxies are then used to create hierarchies of intellectual ability in order to confer opportunity and privilege. We don't expect transfer; just to find out who is bright.

All those who shape educational policy must rethink what to offer our children. Schools should not be boot camps for learning how to make a living, they should be places for learning how to make a life. Perhaps we should think about what will contribute to a rich life and a satisfying childhood. Perhaps we should revisit Dickens, not *Hard Times* but *Great Expectations*.

I hope we can create a vision of education that does justice to the capacities of children's minds, that acknowledges the contribution the arts can

make to the realisation of those capacities and that does not settle, either metaphorically or practically, for either the so-called basics or the right-angled facts that Thomas Gradgrind believed so important. Dickens was right. He knew the facts were not enough. It's time we knew as well.

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藝術到底教些什麼？

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學校裡藝術課程經費太少，凸顯出藝術課程不受重視。然而藝術課程卻是培養孩子的判斷力，處理未知、意料之外的事物，對於瞭解人生、豐富人生，貢獻更是難以計量。

狄更司的小說《艱困時代》(*Hard Times*)一開場有位湯瑪斯·葛雷得葛藍德，對一位小學校長談到教育的理念：

「我要求的是事實，教給學生事實，其他的東西不要，人生唯一有價值的東西便是事實，將事實深植在孩子們心中，剷除一切其他的雜物，只有事實能使人成為理性的動物，剩下的都是無用之物，我以這種理念帶大了我自己的孩子，我也這麼帶大了這些學生，而你，也要緊抓著事實不放！」

這位湯瑪斯·葛雷得葛藍德在1854年提出的理念，今天已經不適用了，現在所提倡的教育目標比過去提高，也比較抽象，難以具體評量。學生不但要知其然，更要知其所以然，發揮想像力進行複雜批判的思考。二十一世紀需要獨立思考的人才，因為只有這樣的人才能主動發掘問題、解決問題，校園外的真實社會中充滿了各種突發狀況的挑戰，沒有人敢說對哪一件事能有十成的把握，我們擬定的教育內容和教學方法，必須考量未來的演變，因為教育會影響到我們如何塑造下一代的思考方式。

經驗是教育主要的媒介，而教育政策足以左右孩子在學校裏的經驗，進

而影響他們未來的思考能力、理解模式以及語文程度。因此就學校課程來說，什麼要教、什麼不教、怎麼去教，就變得格外重要，因為時間很寶貴，必須做最有效的利用，提升每堂課對學生的效益，減低機會成本，換句話說，教育的內容、形式與目標，對下一代思考方式的成形影響重大。

錦上添花

藝術對中小學來說，不算是「重要」的學科知識，不少教育高層認為藝術根本就不是知識，談的只是情緒、主觀的本能，與抽象思考或利用抽象思考進行的推理都沒有什麼關係。學校既然一向重視智育，所以藝術就成了一種休閒娛樂，固然不錯，但卻可有可無。

要了解藝術在中小學教育中的地位，預算是一大指標，根據教育標準考察處（Office of Standards in Education）1996年的一份報告，1995/96學年度英國各國中的視覺藝術教育支出，從每個學生0.7到8英鎊不等，平均是2.88英鎊。對此我們應做何是觀呢？藝術真的無關抽象思考、無助於智力嗎？或是藝術真的對學生有幫助，真的有用嗎？

本文探討的便是藝術該教些什麼以及藝術需要什麼樣的思考能力，然而一個很重要的前提在於教學的品質，藝術和其他科目一樣，也可能教得不好，但我的評述是針對理想中的教學而言。另外一點和我個人的資歷有關，由於我是畫家和美術教師出身，所以我舉的例子大部分是視覺藝術方面，但其他的藝術領域也有同樣的問題。

藝術課

在藝術課上學生可以了解到，要創造出完整而令人滿意的作品，必須對作品中各組成要素的關係十分敏銳，不論是散文或詩篇、全套的舞步，或是演員的台詞動作，各組成要素之間的關係非常重要。這種關係沒有公式可套，必須仰賴肢體感官的經驗，而這種情形也不僅限於藝術，如果把科學研究視為一種藝術，也同樣需要身體的經驗告訴我們一個假設是否成立，一個理論是否經得起考驗；而在藝術中，如何決定作品中各項要素的關係，身體的經驗

藝術……並不代表高深的知識。在決策核心圈子當中，很多人認為藝術根本與知識毫無關係。

是判斷的主要基礎。

令人吃驚的是學校課程中，很少有機會讓學生練習做這樣的判斷，學校教育過於重視基本學科，讓學生誤以為硬背死記才是「正確」的答案。國語和數學的學習方式不脫記憶和套用，但藝術絕非如此，藝術的獨特之處便在於它強調關係的重要性，而若想創造出優美的關係，必須「跟著感覺走」，這是一種情感的認知應用，其中最重要的是判斷而非規則。

鼓勵多樣化

藝術帶給孩子的觀念是，問題不會只有一種答案、一種解決辦法，換句話說，藝術鼓吹多樣、多變，自創的筆畫對教方塊字的老師可能是一個惡夢，但對美術老師來說卻是求之不得，在藝術的世界中，「好」的定義不只一種，藝術使我們可以用各種不同的角度來看世界，為心靈多開好幾扇窗，但是學校卻不重視這樣的科目。

選擇題型的考試，其客觀並不在選項的安排，而在計分的方式，以及完全沒有判斷的空間。大家想想這類考試讓學生體會到什麼？同一個問題可能出現多種不同的處理和回答，正是孩子表現個人特色的一個方式，但在教改追求評量標準化、課程統一、學科目標一致之際，足以均衡整個課程的藝術科，卻被視為不重要的副科，實在是莫大的諷刺。其實，教學越希望正常，就越需要藝術教育。

藝術告訴孩童問題越複雜，越沒有固定的目標，目標往往會隨著情況改變而調整。所謂理性的解決之道，典型的模式就是先決定明確的目標，再依此擬定對策手段，最後再做檢討，若目標仍未達成，再找其他的對策手段，整個過程又重複循環。

然而，這樣的方式與現實生活不符，更迥異於藝術作品發展的模式。藝術科目中重視的是接受預期之外的發展，隨著創作一步步開展而做調整，在最理想的情況下，藝術作品不是作者的獨白，而是對談，充滿各種驚喜與變數，沒有真正精彩的對談（作者和作品之間），就激發不出這些驚喜。藝術所追尋的正是能夠賦予作品新意的驚喜，目標倒毋須堅持，創作的目的不是把原料做成預定的樣子，而是探索創作過程中會有什麼新的發現。

世界無比遼闊

藝術教育還教給孩子，儘管我們的文化如此重視文字與數字，但這個世界卻不是只靠文字和數字就可以全部交代清楚的。我們的認知絕不只限於語文能夠表達的範圍，正如麥可·波瀾義（Michael Polanyi）所說：許多事我們知道，但不一定說得出來。這一點值得學生和教育界的決策者深思，要知道，爲了將知識的條件變成具體概念，而將所知簡化爲數字或文字，以便施教者能夠具體評量學生的進度，其實是本末倒置。比方說，藝術的一大功能在於引發同理心，以瞭解他人的心路歷程，這一點有賴於藝術作品點燃知音心中的火花，乾巴巴的文字是做不到的。

以同理心體會他人的經驗，只是藝術擴展人類視野的方法之一，其實人類能夠創作出這類感人的作品，正說明了透過各種方式釐清想法，將之呈現爲作品讓其他人瞭解，是我們固有的能力與需求。藝術和科學一樣，都是人與人之間溝通的管道，分享彼此最狂野的想像、最深層的感情，那種藝術作品帶來的獨特經驗。不論是唐朝花瓶細緻的曲線，或是貝多芬晚期四重奏作品中豐富的和弦，不論我們身在何處，只要懂得如何去感受，都會深受感動。而培養這種感受的能力，正是藝術教育的一大目的。

如果把藝術視爲意義的媒介，把「識字」的定義擴大爲有能力解讀及運用各種不同的意義形式，那麼藝術教育也是「識字」的一個途徑。更進一步來說，藝術教育一如科學的教育，同樣能夠培養學生不同形式的「識字」能力，以了解不同的表達形式所蘊含的意義。

明察秋毫

藝術教育讓學生了解到，細微的差別也可以產生極大的影響，藝術講究的就是細節。日常生活中主要的知覺模式通常不會注意細節，大部分的時候我們看東西只求「認得」，不會去觀察視野中的各種細節，試想有多少人好好看過自己住家的正門是什麼樣子？如果要你畫，你畫不畫得出來？平常我們頂多看一下確認到家了沒有，是不是該粉刷了，或有沒有人在家，很少有人會去注意房子視覺上的特色或各部分之間的關係。然而這正是藝術教育要教的東西，希望引導學生細心聆聽樂曲的旋律、觀察舞蹈的動作、欣賞建築的外

我們有多少人真正好好看過自己住的房子，說得出房子是什麼樣子？一個簡單的測試就是畫畫看。

觀，將一切當做藝術形式來體驗，這樣的「看」才有助於感受。

這類的美感經驗並不只存在於精緻藝術，看到都會街景、雲彩變幻、牆上撕落的精美拼貼海報，都可能令人感動，然而這些與真正的藝術作品還是有所不同。藝術作品有其傳統源流，反映創作者的意圖，以及社會歷史所賦予的意義；一切事物都可以純粹就其形式來觀察，但是要感受藝術作品，就不只是看形式。

藝術讓學生了解到面對一種素材，必須透過素材來思考，也必須考量素材本身。各種藝術形式都有具體呈現其意象的媒介，例如音樂透過樂音的排列，舞蹈利用舞者的肢體表現，繪畫藉由畫布上的視覺效果；這些媒介對創作者而言既構成許多限制，也提供許多獨特的可能。但是要將這些可能化為實際的結果，孩童必須將素材轉化為媒介，也就是透過素材呈現他內心的想法。要做到這一點，孩童必須了解素材本身的限制與可能，運用各種技巧將素材轉化為媒介。

藝術中的新生命

不只是素材經歷這種轉化，創作的孩子也同樣有所轉化。「藝術創作」這四個字代表的不只是作品，還包括創作的過程，「創作」既是名詞也是動詞，創作的過程不僅及於作品也及於創作者，由這觀點來看，創作者藉由創作的過程和成果，得到了新的生命。

那麼這種新生到底是如何發生的？首先，藝術創作利用重新建構的情境，顛覆我們熟悉的世界，例如杜象（Duchamp）所畫的尿壺題為《噴泉》，放在美術館中展示，就是要刺激觀眾打破成規，以新的視角去觀察平常沒注意到的盲點；他的用意不僅在凸顯作品本身，也要挑戰我們對藝術的成見。顛覆常態、重構情境，因為違反一般的期望，因此激發我們質疑自己的經驗，我們不僅注意到作品本身，也注意到周遭事物在新的觀點建立後所呈現的不同面貌。

其次，藝術作品使我們注意到平常忽略的事物，使我們能以全新的觀點來看這個世界，如果藝術教育充分發揮其功能，還能培養學生有能力以自己的方式重組對世界的認知。科學上的新發現雖然也是一種重組，但是科學總離不開現實，這是吾人對科學的期望；而在藝術的世界就沒有這種限制，可以盡情發揮想像力去重組。

藝術帶給我們的經歷，是其他資源所無法替代的，透過藝術，我們才能夠深入瞭解人類情意、感受之豐富多樣。

要談論藝術也有特殊的要求，試想如何才能描述出戴維斯的小喇叭獨奏，或是赫普沃斯栩栩如生的銅像作品？重點不在於用語言重述你感受到的作品特質，而在於透過語言傳達出那些「只可意會不可言傳」的特色，因此關鍵就在於說出那些「不可說」的感受。

形之言語筆墨

這時，我們便需要仰賴最珍貴的一種語言能力：比喻。比喻不把話說白，而是拐彎抹角的暗示。學生若要描述或傳達他所看到的東西，說明作品帶給他的感受，必須窮盡文采創造出一套能「達意」的語言，就好像童言童語中天外飛來的一句話，或是俚語中的鄉土詩意。藝術批評不僅有助於我們注意到原先忽略的事物，更能指向一幅新的景色，換句話說，設法把看到的東西說出來，往往能夠帶來新的發現。

最後，藝術能帶給我們獨一無二的體驗，讓我們了解人類的感受何其深廣。有些藝術作品能夠帶領我們進入另一個世界，這樣一種「旅程」震撼人心，甚至讓人完全忘情於作品中的情境。當然，不是每個八歲小孩都能達到這番體驗，誠如我以前的繪畫老師所說，「慧眼才能識英雄」。八歲小孩通常還達不到這個境地，但是我們希望助他們一臂之力，培養孩子各種形式的「識字」能力，藝術作品對他們就不再遙不可及，而能領略藝術傑作之美。

藝術所需要的各種認知機制並非各自獨立，而是互動頻繁。例如留心細節時也得注意整體構圖；受限於技巧，主題必須彈性調整；思考時語言與意象必須並用，意象之形成一點也不簡單，而是一切因素互相牽動的複雜過程。要透過教育培養學生這項技能需要時間，對於真正重要的教育目的，我們都太沒耐心，只求績效、只看短期的目標，汲汲於「立竿見影」的成果。我們應該將眼光放遠，不要再用數字成績來衡量一切，藝術教育要教得好需要時間、資源與觀念正確的師資。藝術教育不只是教小孩畫畫貼在冰箱上而已，如果社會上對藝術教育普遍存著這種看法，藝術教育永遠不會受重視，如果學校普遍存著這種觀念來教學，這種藝術教育也不值得受重視。

學習轉移

藝術教育究竟只是改變學生對藝術的看法，還是有更多的作用，例如影響學生學習其他科目的策略或態度？可惜目前還沒有確切的證據，足以證明學童能將藝術課上學到的東西應用在其他領域（例如人際關係或數學和其他的理科），因而較能接受多重的解釋，或是在認知上較為靈活。很多提倡藝術教育的人聲稱有這樣的效果，但研究人員發現這種「學習轉移」很難具體測量。在較低的層次上，學生學到的一切都可以互相為用，但這樣的互相為用不等於跨領域的學習轉移，跨領域的學習轉移是指學生能將藝術課學到的心得，化為學習其他學科時的認知優勢。有人宣稱這類學習轉移確實存在而且舉證歷歷，但其實目前還沒有充分的證據，更別說據以決定教育方針了。其他學科同樣沒有證據支持學習轉移，例如學過幾何能讓人日子過得更合邏輯，或是物理能幫助我們在處理科學以外的事物時更有科學精神。

既然各學科的內容似乎不能「觸類旁通」，那為什麼要教這些科目？這個問題可以有不同的看法，有人可能直覺認為藝術課的內容確實可以用在其他場合或學科，只是我們的研究方法不夠成熟或評量工具不夠精確，所以觀察不到轉移的成效，也就是問題出在研究，而不在課程本身。目前哈蘭德(John Harland)與金德(Kay Kinder)兩位學者，得到RSA和NFER贊助，正在進行這方面的研究，我們衷心期盼他們的研究成果。

也許我們不該問藝術課學到的東西能不能轉移到其他領域，因為基於藝術教育本身的價值，就應該在學校課程中佔有一席之地，不需考慮其他的邊際效益。另外，雖然研究結果不足以證明藝術教育的內容可以轉移做跨領域的應用，但同領域的轉移卻是無庸置疑的，也就是應用於學校以外相仿的情境。此外，學童在藝術課程中學到要重視自己和別人的作品中的「優質關係」，比較可能在周遭的環境中也重視這樣具美感的「關係」。以上這三種觀點都有其可取之處。

藝術的獨特價值

藝術值得重視的另一個原因，在於藝術對人類經驗所特有的貢獻。藝術的呈現感動人心，擴展我們的思考，這樣的價值已經值得肯定，不需要其他的理由。若老是執著在「功課」上，只會讓人忘了活在當下的重要，說的更嚴重

一點，根本就忘了活。

關於藝術課程的同領域轉移，還有一點不能不提。中小學重視的「主科」都是理科這些專門的科目，例如高等數學，正因為這些科目非常專門，在生活中的應用也就有限。學校重視這些科目，列為必修，對未來想從事相關工作的學生固然合理，但是其他人怎麼辦？藝術課學到的東西，可以說只要醒著的時候分分秒秒都用得到，這是艱深的技術學科望塵莫及的，那麼，這些技術學科既不能使學生的頭腦更靈光，應用在其他領域上或生活中的機會又不大，為什麼人人非學不可呢？

有一個十分關鍵但大家心照不宣的作用，就是要篩選學生；一般的觀念認為主科比較困難，而主科成績又反映智力的高低，於是主科成績就成了智力的代名詞，據此判斷每個孩子的才智高低，以分配機會和資源。我們根本不期望轉移，只是要挑出哪些學生最聰明。

教育決策者必須重新思考，我們到底要教給學生什麼，學校不該變成謀生的訓練營，而是教導下一代如何生活的地方。也許我們該思考的是怎樣的人生才充實，怎樣的童年才快樂，也許我們應該重讀狄更斯的作品，不是《艱困時代》，而是《前程遠大》。

我希望我們的教育制度能夠重視孩子的各種心智潛能，了解到藝術教育乃發揮這些潛能的一大關鍵，不論理念上或實際上都不再侷限於所謂的主科，或是葛雷得葛藍德所強調的事實。狄更斯說的沒錯，他深深了解只有一堆死的知識是沒有用的，我們也早該醒悟了。