

2. Universal Achievements: What do virtually all people come to know and learn to do?

Introduction

What human achievements are universal?

An achievement is called universal if everyone attains it. Very early behavior (like sucking) is a universal physical reflex. We attain universal achievements because of the way our bodies are constructed and because of our early interactions with the people and things around us.

Early in our lives (barring birth abnormalities, physical or psychological trauma, or other extraordinary circumstances) all human beings master such universal skills as eating, sleeping, grasping, pointing, and walking. We use our senses and body movement to explore the world and begin to recognize images and words as representations of people, places, and things. We also begin to develop ways of interacting with other people.

Universal Achievement in Art

Universal Art Making Achievements

Virtually all human beings learn to make marks. Given the opportunity, very young children all over the world, will make marks and scribbles. (Kellogg, 1970)

Viktor Lowenfeld (Lowenfeld & Brittain, 1987) described stages in children's drawing: 1) Preschematic, 2) Schematic, 3) Gang Age: Dawning Realism, 4) Pseudo-Naturalistic, and 5) Period of Decision. Children at the Scribbling stage enjoy the kinesthetic process of scribbling but are not attempting to represent anything in the world. Over time scribbles become more orderly and eventually many children give their scribbles names. At the Preschematic stage children begin consciously to represent things, usually beginning with people. They reveal their thinking in their drawings. In the Schematic stage children develop a specific way (schema) to represent things. Schematic drawings show space with things standing on a baseline.

Rudolf Arnheim (Arnheim, 1954) proposed a non-differentiation theory to explain the development of children's drawing. He observed that children use the simplest version of the following visual qualities until they learn to differentiate differences within that quality.

NON-DIFERENTIATED QUALITY DIFFERENTIATED QUALITY

All shapes = circle	squares, triangles, rectangles, amorphous shapes, etc.
All angles = right angle	Acute and obtuse angles
All Sizes = Pretty much equal	Proportions considered in sizes
All colors = sharpest, closest, favorite	Varied colors
All relationship = on top of or beside	Overlapping

Although early representational drawings are quite similar across cultures, researchers (Wilson, Hurwitz, & Wilson, 1987) have found evidence of some cultural differences even among young children. Children can learn from schema from other children, adults, and popular culture.

Universal Achievements in Making Sense of the Art of Others

Virtually all human beings learn to recognize images or symbols as representations of things. They learn to distinguish pictorial schema from other kinds of marks, especially from alphabets and linguistic characters. Pictorial schema represent things by picturing what is important to recognize about them, as do children's drawings of people, animals, houses.

Cultural practices regarding the making and viewing of images vary significantly. In some cultures looking at picture books and using coloring books are very common. Other cultures discourage or restrict the making or viewing of representational images. Children growing up in some cultures are more inundated with images from pop culture than children growing up in other cultures. It is difficult to be sure what art understandings, if any, are universal.

Non-Reflection Viewpoint

Clover and Erickson (1997 and 1998) propose that people using the Non-Reflective Viewpoint¹ have an immediate positive (or negative), response to artworks without benefit of reflection. This viewpoint is based on little or no information beyond the artwork itself or it may be based on something that the artwork reminds the viewer of, that is, a free association. Sophisticated as well as naïve viewers can respond immediately to particular artworks. However more experienced viewers can reflect on and explain their responses.

Parsons interviewed 300 individuals over a period of ten years about their responses to eight artworks. He found five distinct stages of art understanding. According to Parsons people using ideas associated with his first (favorites) stage have "an intuitive delight in most paintings, a strong attraction to color, and a freewheeling associative response to subject matter" (Parsons, 1987, p. 22). Erickson (1995) used Parsons' stages in her analysis of second graders' responses to art and also found evidence of free association.

Housen (2000) proposes a theory of developing art understanding based on many interviews with children and adults. Viewers in her first stage "lack a framework for responding to works of art and use the tools closest at hand. These naïve viewers, relying on perceptual cues, let bold and obvious stimuli in a work of art trigger idiosyncratic associations [with which they] create stories" (Housen, 2000, p. 282).

Is Art a Universal Language?

In spite of some pretty significant cultural differences in making and understanding art, who has not heard the expression "Art is a universal language"? This claim is widely questioned today. This notion became popular in the 20th century. A brief history of how art has been taught in Europe and the United States sheds light on the roots of this belief.

Building on the achievements of the Renaissance, the French Academy and other art academies taught drawing, perspective, and other art conventions to aspiring artists. In the 19th and 20th centuries these conventions were challenged by artists such as the Impressionists, whom the academy rejected, and later by Post Impressionists, Expressionists, Cubists, and other founders of "Modern Art."

In 1899 after studying art at the Tokyo Academy of Fine Arts, Arthur Wesley Dow wrote a book aimed at teaching composition. As a faculty member at Columbia Teacher College, Dow's ideas spread throughout the United States in art education magazines and in foundation courses in art schools and universities. Clive Bell, a founding spokesperson for Modernism, proposed that meaning exists in what he called "significant form", that is, in the organization of visual and tactile features. In 1913 Bell (reprinted in 1958) wrote that "to appreciate a work of art we need to bring with us nothing but a sense of form and colour and a knowledge of three-dimensional space" (p. 28). He went on to observe that "people who cannot feel pure aesthetic emotions remember pictures by their subjects [subject matter]; whereas people who can [feel pure aesthetic emotions], as often as not, have no idea what the subject of the picture is. They have never noticed the representational element, and so when they discuss pictures they talk about the

¹ Clover and Erickson originally labeled this viewpoint "Immediate Attraction."

shapes and forms and the relations and quantities of colours" (Bell, 1958, pp. 29-30). In 1924 Roger Fry (reprinted in 1962), another advocate of Modernism, wrote that "the form [sensory and formal features] of a work of art has a meaning of its own" (p. 306). Modernism dominated the European American artworld till the last decades of the 20th century. Modernism extolled sensory features and formal organization as paramount in art understanding.

In the United States, formalism continues to be the core content of a great many, if not most, elementary, secondary, and higher education art courses, especially at the foundation level. Art historians use many commonly agreed upon formal terms to describe the artworks they study. Today postmodern values have gained prominence among many art specialists. Postmodern values include representation of women artists, multiple art forms (such as so-called "primitive art", folk art, crafts [sometimes called "minor arts"], art by self-taught artists, etc.), diverse ethnic and cultural art ideas, and cultural meanings.

During the height of Modernism, some European Americans applied Modernist ideas to their interpretations of art from other cultures, even if those cultures held very different fundamental beliefs about art. Claiming to understand an artwork without any understanding of the context within which it was made and viewed or used, can be a kind of cultural imperialism. Certainly one can view and enjoy an artwork from an unfamiliar culture without contextual information and respond only to the organization of its visual and tactile features. However it is a mistake to assume that the people who made the work or the people for whom it was intended necessarily share/shared the same perception.

For purposes of comparison, let us consider for a moment our understanding of spoken language. We can perceive, perhaps even enjoy, sensory (auditory) features by listening to people conversing in an unfamiliar language. We may also perceive some expressive feeling or mood associated with the manner in which the words are delivered, but we might be very wrong about what the conversation means to the speaker and those to whom he or she is speaking if we have not learned the language.

Though less explicitly defined, the language of art, like spoken language, is taught by culture. We may enjoy the sensory (visual and tactile) features of an artwork made in a culture with which we are unfamiliar. However without having grown up within that culture, we are likely to miss or completely misinterpret subject matter, symbols, function, or context that members of that culture would easily grasp.

Some ways of seeing must be learned and are learned differently in different cultures. Though they are interrelated, sensory enjoyment and art understanding are not identical. Both sensory enjoyment and art understanding are affected by one's culture and environment. Because growing up in diverse cultures teaches people different ways of perceiving the world and art, it is difficult to support the claim that art is a universal language.

What do researchers say about universal development?

The physical development of the human brain grows phenomenally in the first few years of life. In early childhood, children think differently than they do as they grow older and gain more experience. Before very young children learn the conventions of their culture, they make decisions about how to act based on the power of the people around them and later as tradeoffs for rewards and punishments.

How do human brains develop physically?

L. F. Lowery (1998) describes the physical development of the human brain. At birth the brain “is estimated to contain about 100 billion cells. At birth it is about one-third of its eventual mass. Within two years after birth it will double in size, and over the next 15 years many of its cells will develop 600,000 connections between themselves and other cells. [More] than 100 billion interactions are possible within our heads” (Lowery, 1998, p. 3-4). There is an overproduction of brain cells and “about half of these cells die before birth” (Lowery, 1998, p. 4). “The brain becomes bigger after birth because brain cells grow in size and because the webbing of connections between and among cells increases” (Lowery, 1998, p. 5). Over 40 regions develop in the brain, each governing a different function. The brain organizes perceptual data that enter through the senses into different storage areas and makes connections among the cells in those areas. For example visual data is stored near the back of the brain.

An individual’s environment, experience, and interest affect the number of connections made in that individual’s brain. “Evidence indicates that the more connections you have the better you are able to solve problems, think clearly, and understand events” (Lowery, 1998, p. 6). Education dramatically affects the number of connections in the brain. “Autopsy studies of brains found that very young children have fewer connections than school-age children. University graduates who remained mentally active had up to 40 percent more dendritic material [brain connectors] than brains of high school dropouts. If a person is healthy, he or she can learn something new at any age by generating new connectors and integrating them into prior structures. A 70-year-old can learn a new profession if interested in doing so. The ability to learn is possible throughout our lives. Scientists have found that educated brains--those with more connectors--better withstand the destructive attacks of Alzheimer’s disease. Older people employ different problem solving strategies than do younger ones. Older people more often use the prefrontal cortex. The prefrontal cortex enables a person to consider numerous aspects of a complex problem at the same time, thus increasing the likelihood of deriving a satisfactory solution to the problem” (Lowery, 1998, pp. 6-7).

How do people develop thinking abilities?

J. Piaget, an early developmental psychologist, developed a theory of cognitive development organized around a sequence of four stages that are each destroyed as the next stage is achieved: sensori-motor stage (birth to age two), preoperational stage (ages two through six), concrete operations stage (ages seven through twelve), and formal operations stage (ages twelve through adulthood). Researchers have found that many (perhaps most) adults never reach the level of formal operations.

Piaget concluded that young children construct what they know through their actions: first through reflexive action, then through schematic and habitual action, then through actions based on intention and an understanding of environmental consequences, then through experimental action, and eventually through actions based on representative symbols.

Sensori-motor understanding is the first stage of cognitive development and is universal. Children at this stage take in information through their senses and through the movements of their bodies. They develop a sense of self, separate from the world around them. They understand that one thing can affect another and that things continue to exist even when not being perceived.

Preoperational understanding is Piaget's second stage of cognitive development. According to Piaget, children at this stage are self-centered and have difficulty understanding the perspectives of others. Children in this stage begin to understand symbols (such as words and images that represent things in the world).

D. Kuhn (1999) is a cognitive psychologist who has studied the development of critical thinking, which she defines as the evaluation of assertions (or statements). She describes the thinking of children younger than four as "realist." She writes that children believe that "an account of an event differs from the event itself only in that one exists on a representational plane whereas the other is perceived directly. In other words, the world is a simple one in which things happen and we can tell about them. There are not inaccurate renderings of events" (Kuhn, 1999, p. 19).

Kuhn seems to disagree somewhat with Piaget's description of two- to six-year olds as egocentric. Research leads her to conclude that "Somewhere in the age range of three to five years--the exact age being a matter of debate--children acquire the insight that assertions are expressions of someone's beliefs. By the time they achieve this insight, children will have developed the ability to represent mental states ...; they also have begun to use mental-state concepts such as desire and intention as a means of explaining their own and others' behavior" (Kuhn, p. 19). Thus these young children have developed some understanding of the perspective of others.

Because two- through six- year olds understand that statements can be about beliefs, they recognize that there can be a conflict between a statement and physical reality. However Kuhn's understanding of developmental research leads her to conclude that even though eight-year olds do understand that people can have different desires and intentions, they still "tend to assume that the other will interpret the stimulus in the same way they do. They do not yet realize that two people can hold genuinely different beliefs except in the case where one party's belief is misinformed and incorrect. Children at this age lack the interpretive or 'constructive' theory of mind that would lead them to understand conflicting representations of the same event as legitimate products of individuals' unique meaning-making efforts" (Kuhn, 1999, p. 20).

Preschoolers have a difficult time understanding where their knowledge comes from or when they learned it. However, by around the age of six, according to Kuhn, children can distinguish between evidence that an event has occurred and a cause explaining why an event occurred. She describes this understanding as "a growing metacognitive capacity to reflect on one's own

knowing” (Kuhn, 1999, p. 20). Children with this level of cognitive development hold an “absolutist” view of knowledge. They understand assertions to be matters of fact that are either correct or incorrect.

P. M. King and K. S. Kitchner (1994) describe seven stages in the development of reflective judgment grouped in three broad categories: 1) Pre-Reflective, 2) Quasi-Reflective, and 3) Reflective. They identify three stages of Pre-Reflective Judgment. In King and Kitchener’s Pre-Reflective Stage 1, “Typically, [truth] is expressed in the belief that there is an absolute correspondence between what is seen or perceived and what is. Beliefs do not require justification since one must only observe to know. Beliefs are not consciously constructed; they are simply held and are not open to criticism or doubt. Inquiry as a process is not perceived” (pp. 47-48).

W. G Perry, who studied college students’ cognitive development, found some college freshmen exhibiting a level of understanding similar to the “absolutist” view described by Kuhn. He refers to this kind of thinking as “dualist.” People with dualist views divide “meaning into two realms-- Good versus Bad, Right versus Wrong, We versus They, All that is not Success is Failure, and the like” (Perry, 1981. P. 79). The sort of dualist thinking that Perry describes affects not only cognitive understanding, but also moral and social understanding.

How do people develop their abilities to make moral decisions and to interact socially?

L. Kohlberg, a child development researcher and moral philosopher, outlines six stages of moral development grouped into three general categories: Premoral or Preconventional Morality, Conventional Morality, and Postconventional or Principled Morality. He identifies two premoral or preconventional stages of morality: 1) Punishment and Obedience and 2) Instrumental Exchange. According to Kohlberg, when people are in the Punishment and Obedience Stage, they are motivated to obey in order to avoid retaliation from someone more powerful than themselves. When people are in the Instrumental Exchange Stage, they see favors and punishments as trade offs. They make concessions in order to get what they want or need. As people move beyond Premoral or Preconventional Morality into Conventional Morality, they are increasingly affected by the expectations of their peers and society.

N. Eisenberg is a developmental psychologist who has focused her studies on social development. She has found that “young children are capable of prosocial behavior oriented toward others” (Eisenberg. 1996, p. 207). She reports that “in the second year of life, children sometimes make focused efforts to interact positively with victims of distress” (Eisenberg. 1996, p. 207). She has also found “older children are more likely to share objects or money with unknown others (e.g. with charities) and older children are more skilled in their comforting communications than are younger children. The consistency of children’s prosocial behavior across setting and time seem to increase with age” (Eisenberg. 1996, p. 207). However these findings are not necessarily inconsistent with Kohlberg’s Instrumental Exchange stage of moral development. Eisenberg reports that “younger children are more likely to assist in order to obtain material or social rewards” (Eisenberg. 1996, p. 207).

M. Keller and M. Killen are researchers focused on the development of social cognition. Consistent with Kuhn’s findings (see “Cognitive Development” above), they propose that “with

increasing age children begin to draw inferences about the psychological meaning of situations in terms of the motives, intentions, and feelings of the people involved” (Keller & Killen, 1998, p. 304). Their analysis of research findings leads them to conclude that “preschool children have a sense of self and are capable of understanding intentions, emotions, and motives. In addition they recognize the necessity of fairness and understand social conventions” (Keller & Killen, 1998, p. 305).

Can cultural values affect very early human development?

In the last couple of decades developmental theorists have been increasingly persuaded by the work of an early Soviet developmental researcher, L. Vygotsky. Vygotsky believed that there are some natural or elementary mental processes, but he argued that all higher mental processes are achieved through mediation. That is, higher mental processes are reached only through interactions with another person (in early years usually with the child's mother). He did not see cognition as something achieved in isolation by individuals, but something developed socially. Examples of the experience of young children in diverse cultures may suggest just a few of the ways that cultures can affect development.

What is the early childhood experience of Korean children compared with US children?

Cultural traditions in Korea prescribe distinctive behaviors by expectant mothers even before their children are born. "A mother believes that every aspect of her experience during her pregnancy affects the unborn child. A mother ensures that she experiences pleasant events, and sees things that are precious, noble, and beautiful (such as white jade or a peacock). She avoids coming in contact with hideous, unpleasant, or ominous creatures or objects" (Kim & Choi, 1994, p. 239-40). There are prohibited foods for expectant mothers and a long list of prohibited behaviors such as envying, swearing, teasing, dressing too warmly, sitting crookedly, running in haste, or leaving a door open.

Korean mothers are traditionally indulgent of their children. "The most likely possibility is that mothers are psychologically enmeshed with their children. They do not see their children as objects of discipline" (Kim & Choi, 1994, p. 241). Kim and Choi report on an ethnographic study that found that "Korean mothers feel little or no conflict in sacrificing their careers to devote themselves to their children. For Korean women, their motherhood is their single most important role. A Korean mother's personhood is not deserted but fused with that of her children. It is not a case of self-denial but of self-transformation" (Kim & Choi, 1994, p. 242). "In Korea, a mother speaks *for* the child, on behalf of the child, rather than *to* the child. From the children's perspective, the world is put forward to them by their mothers. Children are not encouraged to assert their own ideas. Even if children's ideas are creatively presented, they are often not appreciated" (Kim & Choi, 1994, p. 244).

How might such early (even prenatal) experience with one's mother affect the early development of children? We may gain some notion of the impact of such experiences from a study comparing the sense of self of Korean children and children in the United States, as reported by Kim and Choi. Korean children's most frequent connotations with the word "me" follow in descending order: 1) family, love; 2) ideals, happiness, freedom; 3) hope, ambition, success; and 4) money, materials and goods. United States children's connotations, on the other hand, are in descending order: 1) I, person, individual; 2) other people; 3) tired, lonely, physical appearance; and 4) good, friendly, sociable. (Kim & Choi, 1994, p. 245). United States children's ideas about themselves seem to be more individualized and detached than Korean children's ideas of themselves. The most significant others for Korean children seem to be family members. United States children seem to "need to prove their worth to others" (Kim & Choi, 1994, p. 246).

What is the early childhood experience of Japanese children compared with US children?

Another study comparing mothering behavior by Japanese mothers and by Japanese-American mothers may suggest yet another way that cultures differ in the experiences afforded their very young children. “Japanese mothers hold their babies or otherwise have bodily contact with them more frequently than do American mothers, and the latter chat with their infants more often” (T. S. Lebra, 1994, p. 260). What developmental differences might one expect to find when early childhood learning is mediated more by touch than by language? T. S. Lebra found that “American babies tend to be more vocal and ‘happily’ so, whereas Japanese babies, who are more ‘lulled,’ soothed, and quieted down, sound unhappy when they make vocalizations” (T. S. Lebra, 1994, p. 260). How might an emphasis on touch rather than verbalization affect a child’s early development?

What is the early childhood experience of African children?

J. Rabain-Jamin studied African children living in France. She reports that “in traditional African cultures, modes of speech adhere to a system of relations that strictly defines the position (the status) of each individual in relation to others. Speech is a status attribute. The rank of elder legitimates taking the speaker’s role” (Rabain-Jamin, 1994, p. 148). Just as Lebra found in the case of Japanese mothers and their children, Rabain-Jamin found that “Gusii (Kenya) mothers tend to prefer holding and physical contact and have low rates of visual and verbal interaction” (Rabain-Jamin, 1994, p. 150). African children’s names are part of a system of social relationships. “The caregiver places the infant within a social fabric before teaching him or her to make requests” (Rabain-Jamin, 1994, p. 151). How might socially-defining proper names affect the development of children addressed with these names?

Rabain-Jamin also reports on another study of !Kung children (Botswana) from the ages of one to twenty-two. The study found that !Kung “children are not encouraged to take an interest in objects through comments and stimulation from the people around them. In contrast, caregivers consistently respond when the children engage in social communicative acts (e.g., vocalizations, laughs, smiles) in situations other than actions with objects” (Rabain-Jamin, 1994, p. 151). How might an emphasis on social relations, rather than relationships with objects, affect a child’s early development?

What is the early childhood experience of African American children compared with Euro-American children?

I. K. Blake also studied mother-child interactions in an attempt to identify the characteristics of language development of working class African American children. Blake compared these children with both European American working class and middle class children in order to be able to distinguish any ethnic and class differences. Blake found that “working-class African-American children used more of their speech to talk about personal and interpersonal knowledge than both working-class and middle-class Euro-American children” (Blake 1994, p. 188). “The greater emphasis of African-American children on the expression of internal states and social meanings further support their distinctive cultural orientation for interpersonal interactions” (Blake 1994, p. 190). Once again one might wonder about the effects of speech that emphasizes personal and interpersonal knowledge on the early development of children.

What are some of the limitations of universal developmental theory?

Many developmental theories attempt (at least in part) to be universal in scope; that is, they claim to explain development for all people in all cultures. Although such universal theories can be useful, their authors tend to be members of European American cultures, and may make assumptions that are not appropriate for other cultures.

J. Bruner has challenged the standard view of early childhood development, which he describes as being based on the following four principle tenets: 1) egocentric perspective, 2) privacy, 3) unmediated conception, and 4) tripartism (the belief that cognition, affect, and action are separate processes). He writes: “I do not want to argue that these four premises are ‘wrong’, only that they are arbitrary, partial and deeply rooted in the morality of our own [Western] culture. They are true under certain conditions, false under others, and their ‘universalization’ reflects cultural bias” (Bruner, 1987, p. 86). He goes on to propose that “It can never be the case that there is a ‘self’ independent of one’s cultural-historical existence” (Bruner, 1987, p. 91).