

Scanning

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INTRODUCTION

Anda tentu sudah mengetahui definisi *scanning*. Bila Anda sudah lupa sebaiknya Anda membuka kembali modul-modul yang membahas *scanning* di mata kuliah Reading 1, 2 dan 3. Dalam Modul 1 Reading 4 ini Anda kembali mempelajari *scanning ini*, hanya bedanya adalah tingkat kesulitan teksnya lebih tinggi. Jadi bila nanti Anda menemukan kata-kata sukar, jangan khawatir! Karena dalam *scanning* ini Anda tidak akan ditanya arti kata-kata yang sukar tersebut, tetapi Anda hanya diminta mencari informasi yang diminta dengan cepat. Mata kuliah Reading 4 ini merupakan mata kuliah Reading terakhir, jadi Anda diharapkan sudah mempunyai perbendaharaan kata dalam bahasa Inggris yang cukup.

Selamat belajar dan sampai jumpa di modul berikutnya.

KEGIATAN BELAJAR 1

Scanning 1

EXERCISE 1

Read the following article and answer the questions!

CAUGHT BROWSING AGAIN

Browsing is an obvious idea. But it is not necessarily the right one. Too much of the Net's future is staked on this unchallenged notion. And the sooner we stop relying on this concept. Just think: How much browsing do you do in real life, or, as John Perry Barlow would say, in "meatspace"? Most working adults don't have time to spare. Browsing is better suited to the confines of a doctor's waiting room, an airplane seat, or a rainy Sunday afternoon. Rarely does browsing suggest the serious, productive use of one's time. Rather, it suggests another area, when work, home life, and vacations were less entwined than they are today.

So what happened? Why did we suddenly elevate this faulty, serendipitous, and almost haphazard process to its current prominence – even predominance – on the internet? The verb *browse* is derived from the behavior of hungry animals who, in winter when pasture is barren, forage for tender shoots and the buds of trees and bushes. This implies that there isn't a lot to choose from and that what is good needs to be actively sought out.

But browsing takes time – the one thing most of us don't have. For example, I do far less window shopping than I did when I was young (and yes, I miss it). Undeniably, browsing can be fun and useful but, as with tourism, only so much and so often. Funny how we use the words *cruising* and *surfing* to describe our behaviour on the Web. How often do we invoke the words *learning* or *engaging* when we browse?

The web is a digital landmark, as important as the Net itself. Its inventors, Tim Berner's-Lee and his colleagues will probably never fully realize how important their contributions were, and will continue to be, because the web can be viewed in so many different ways. For me, it's less

about multimedia or hyperlinks and more about turning the Net inside out. Instead of sending email to an individual – or to a list of individuals – I can now post a message and invite people to look it over. Sure, we’ve always had bulletin boards, telnet, and ftp on the Net, but the web created a new and more accessible subworld, one more like the window-shopping experience than the original message-passing rubric. And in a way that’s a shame.

Think of the change this way: the internet is now like a city – people go places visit communities. In fact, we even call our own pages “home”. But when we arrive at a place and try to make things happen, we often end up frustrated.

Direct Manipulation doesn’t work

After years of work to make computers more accesible, researchers began questioning whether people really wanted ease of use in the first place. Using a computer is often just a means to an end, so wouldn’t that end be better served if we could delegate tedious computer time to someone – or something – else?.

As far back as 25 years ago, Alan Kay and others suggested that “delegation” was a much better metaphor than “direct manipulation” when focusing on people’s productive use of computers. Later, at Apple – the font of many human-interface advances – delegation became the challengen and “interface agents” became the solution, at first in name only. Instead of constructing a computer that is easy to manipulate directly, the argument goes, why not fashion it after a well-trained English butler who knows you so well that he will do almost everything on your behalf. He will do what you ask and, in some cases, you won’t even have to ask.

Most important, the idea of an interface agent entails its ability to “understand what I mean” Please just do it and don’t bother me. When it comes ti interaction with such an agent, less is more. Let it do the searching, surfing, and cruising. Let it browse for you and bring you the fruits of its labors.

The net population of the Net

In America today, the demographics of personal-computer use is oddly bimodal. Most kids have some access. But, surprisingly, the next largest and fastest growing group (as a percentage of the age group percapita) is those age 55 and older (more than 30 percent of whom own a personal computer).

Between these two groups, we have what I call the “digital homeless” those who arrived on the planet a little too early, or not early enough, to have the time to explore the possibilities of being digital. Many people in this group feel that the online world has nothing to do with them and (according to a report in *Bussiness Week*) value their dryer more than a personal computer.

Among those who are digital, particularly the young and the old, we find a majority of people with free or flexible time, people who can literally afford to spend their time browsing. I cannot. I need to delegate that process. And I’m not alone.

By 2000, we can expect a billion users on the Net. As recently as a year ago, this number seemed outrageously high. Today it is considered a conservative estimate. What this statistic fails to include is the huge number of machines and software programs that will use the Net on our (and their own) behalf. At the turn of the millenium, we’re likely to find those billion human users joined by a much larger number of software agents. Web crawlers, and other computer programs that will do browsing for us. The Net will be roamed mostly by programs, not people. When people do use the Net, it will be for more suitable purposes communicating, learning, experiencing.

The idea that machines not people will dominate Net usage turns the model upside down, not just inside out. Suddenly “pages” if that’s even an appropriate term, will need more and more computer-readable hooks so that programs can see what you or I view from the corner of our eye. When we browse, our eyes gravitate toward images – in the future, these images will need simple digital captions. This will certainly take steam out of the Net-based advertising we know today. Simply put, our eyeballs may not be there to see it.

<http://en.wikipedia.org/wiki/essay>

30 OKTOBER 2006

1. How many users on the Net can we expect by 2000 ?
 - A. 1 billion
 - B. 2 billions
 - C. 3 billions
 - D. 4 billions

2. Who invented the Web ?
 - A. Alan Kay
 - B. The Berners – Lee
 - C. John Perry Barlow
 - D. Tim Berners and his colleagues

3. According to the writer, who are called ‘digital homeless’?
 - A. The young
 - B. The kids
 - C. The adults
 - D. The old

4. The Net will be roamed mostly by
 - A. machines
 - B. programs
 - C. people
 - D. satellites

5. What does rarely suggest the serious, productive use of one’s time?
 - A. Cruising
 - B. Learning
 - C. Engaging
 - D. Constructing the Net

6. Our own pages in the Net are called ?
 - A. History
 - B. Favorites
 - C. Home
 - D. Refresh

7. According to the writer, the Net will suitable for.....
 - A. browsing
 - B. learning
 - C. cruising
 - D. surfing

8. What does “digital homeless’ value more than a personal computer?
 - A. Car
 - B. Cellphone
 - C. Refrigerator
 - D. Hair dryer

9. Browsing can be fun if it is ...
 - A. so often
 - B. so quick
 - C. so interesting
 - D. so timeless

10. The largest and fastest growing group that owns a personal computer is those who age ...
 - A. 35
 - B. 45
 - C. 55
 - D. 65

**EXERCISE 2**

Read the following article and answer the questions!

A FLOATING CHERNOBYL?**The first reactor-on-a barge will bring power to Russia's electricity-starved Arctic**

By Bjorn Carey October 2006

While the U.S. hems and haws over reviving nuclear energy as a less expensive alternative to oil, Russia has dug back 30 years in our nuclear history to find a solution for some of its own energy woes: the floating nuclear power plant.

The Russian nuclear-energy company Rosenergoatom is planning a mobile plant to deliver electricity to hard-to-reach northern territories near the White Sea, where harsh weather makes regular coal and oil fuel deliveries unreliable and expensive. The \$200-million floating plant slated for construction next year could provide relatively inexpensive, reliable, electricity to 200,000 people.

Although the concept of a water-borne nuke plant might sound outlandish, it isn't new, nor did it originate in Russia. Westinghouse Electric Company considered the idea in the 1970s and built an immense dry-dock facility in Jacksonville, Florida, where plants would be launched and floated north along the Eastern Seaboard, conveniently doling out power to towns in need. Engineers would be able to standardize construction for multiple plants in an offsite factory with increased quality control and reduced production costs before tugging a plant to its port of call. But ultimately, says retired Westinghouse consultant Richard Orr, energy conservation following the 1973 OPEC oil embargo killed the project.

The Russian plan is to mount two reactors on a football-field-size barge, float it to a port, connect power lines to the mainland, and turn on the reactors, providing communities with affordable electricity. The plant will store waste and spent fuel in an onboard facility that workers will empty every 10 to 12 years during regular maintenance overhauls. After 40 years, the normal life span for a nuclear plant, the decommissioned plant would be towed away and

replaced with a new one. The reactor and spent fuel would go to a storage facility, but the barge could be recycled.

Yet because the safety of the Russian facility is still unknown, the prospect of resurrecting the Westinghouse idea in the White Sea has drawn protest from environmental groups such as Greenpeace and the Norwegian foundation Bellona. One concern is that a boat could ram the plant and spill waste into the water. An even bigger fear is that a nasty storm could cut the plant off from the land-based power supply required to run plant operations. Should emergency generators fail, says David Lochbaum, director of the nuclear Safety Project at the Union of Concerned Scientists, a Chernobyl-like disaster could ensue. In a worst-case scenario, an overheated core could melt through the bottom of the barge and drop into the water, creating a radioactive steam explosion. Such a cloud could do far more damage than the plume of nuclear fallout kicked up by the 1986 explosion of the Chernobyl nuclear power plant in the former U.S.S.R. Lochbaum notes, because the human body absorbs radioactive water droplets more easily than it does radioactive ash. "Its worst day would be much worse than a land power plant's" he says.

Sergey Obozov, acting director for Rosenergoatom, says that reactors at sea have a proven safety record: The facility would be powered by two 60-megawatt KLT-40S reactors adapted from those already in use on the three Russian nuclear-powered icebreakers. Yet Christina Chuen, a Russian nuclear-energy specialist with the Monterey Institute for International Studies in California, cautions that subtle performance differences might arise when running the reactor for pure energy generation instead of propulsion, noting that the cooling system remains unproven. Although the technology exists to contain a burning core, Rosenergoatom won't say if the plant—which was designed a decade ago—will include the most modern safety measures.

With a building permit in hand, Rosenergoatom aims to have the facility afloat in the port city of Sheverodvinsk in the southeastern White Sea by late 2010. "The Russian have learned a lot about safety from the U.S. Department of Energy, Sweden and Norway—who probably all wish (the Russians) would focus on things other than a floating nuclear power plant," says Chuen, who adds that she wishes the planning process were more transparent. "Maybe it will turn out great, but I just hope they did all the research to make sure it's safe."

<http://en.wikipedia.org/wiki/essay>

26 Oktober 2006

1. When will Rosenergoatom have the facility afloat in the port city of Severodvinsk in the southeastern White Sea ?
 - A. in 2010
 - B. after 2010
 - C. by 2010
 - D. in 2010s

2. How much is the cost of floating plant ?
 - A. \$50 million
 - B. \$100 million
 - C. \$150 million
 - D. \$200 million

3. How is the normal life span for a nuclear plant ?
 - A. 50 years
 - B. 40 years
 - C. 30 years
 - D. 20 years

4. Who get the original idea of a water-borne make plant ?
 - A. Westinghouse Electric Company
 - B. U.S. Department Energy
 - C. Norwegian foundation Bellona
 - D. Rosenergoatom

5. When did Chernobyl nuclear power plant explode ?
 - A. 1986
 - B. 1980
 - C. 1973
 - D. 1970

6. Who is the retired Westinghouse consultant ?
 - A. David lochbaum
 - B. Sergey obozov

- C. Christina Chuen
 - D. Richard Orr
7. Who is the director of the Nuclear Safety Project ?
- A. Sergey Obozov
 - B. David Lochbaum
 - C. Christina Chuen
 - D. Richard Orr
8. How many people will be provided by a floating plant ?
- A. \$50
 - B. \$100
 - C. \$200
 - D. \$250
9. What killed the Project of a water-borne make plant ?
- A. Chernobyl-like disaster
 - B. Budget cutting
 - C. Internal unrest
 - D. OPEC oil embargo
10. If emergency generators fail, what would happen ?
- A. Radioactive ash
 - B. A radioactive steam explosion
 - C. Chernobyl-like disaster
 - D. Overheated core

**EXERCISE 3**

Read the following article and answer the questions!

Psychology

Psychology is an academic and applied discipline involving the scientific study of mental processes and behavior. Psychology also refers to the application of such knowledge to various spheres of human activity, including problems of individuals' daily lives and the treatment of mental illness.

Psychology differs from the other social sciences — anthropology, economics, political science, and sociology — in seeking to explain the mental processes and behavior of individuals. Psychology differs from biology and neuroscience in that it is primarily concerned with the interaction of mental processes and behavior on a systemic level, as opposed to studying the biological or neural processes themselves. In contrast, the subfield of neuropsychology studies the actual neural processes and how they relate to the mental effects they subjectively produce. Biological psychology is the scientific study of the biological bases of behavior and mental states.

The word *psychology* comes from the ancient Greek ψυχή *psyche* ("soul," "mind") and -λογία *-ology* ("study").

History

Early development

The first use of the term "psychology" is often attributed to the German scholastic philosopher Rudolf Goeckel (Latinized Rudolph Goclenius), published in 1590. More than six decades earlier, however, the Croatian humanist Marko Marulić used the term in the title of a work which was subsequently lost. This, of course, may not have been the very first usage, but it is the earliest documented use at present.

The term did not fall into popular usage until the German idealist philosopher, Christian Wolff (1679-1754) used it in his *Psychologia empirica and Psychologia rationalis* (1732-1734). This distinction between empirical and rational psychology was picked up in Diderot's *Encyclopedie* and was popularized in France by Maine de Biran.

The root of the word psychology (psyche) is very roughly equivalent to "soul" in Greek, and psychology came to be considered a study of the soul (in a religious sense of this term) much later, in Christian times. Psychology as a medical discipline can be seen in Thomas Willis' reference to psychology (the "Doctrine of the Soul") in terms of brain function, as part of his 1672 anatomical treatise "De Anima Brutorum" ("Two Discourses on the Souls of Brutes"). Until about the end of the 19th century, psychology was regarded as a branch of philosophy.

Early modern era

In 1879, Wilhelm Wundt (1832-1920), known as "the father of psychology", founded a laboratory for the study of psychology at Leipzig University in Germany. The American philosopher William James published his seminal book, *Principles of Psychology*, in 1890, laying the foundations for many of the questions that psychologists would focus on for years to come. Other important early contributors to the field include Hermann Ebbinghaus (1850–1909), a pioneer in the experimental study of memory at the University of Berlin; and the Russian physiologist Ivan Pavlov (1849-1936), who investigated the learning process now referred to as classical conditioning.

Meanwhile, during the 1890s, the Austrian physician Sigmund Freud, who was trained as a neurologist and had no formal training in experimental psychology, had developed a method of psychotherapy known as psychoanalysis. Freud's understanding of the mind was largely based on interpretive methods and introspection, and was focused in particular on resolving mental distress and psychopathology. Freud's theories became very well-known, largely because they tackled subjects such as sexuality and repression as general aspects of psychological development. These were largely considered taboo subjects at the time, and Freud provided a catalyst for them to be openly discussed in polite society. Although Freud's theories are only of limited interest in modern academic psychology departments, his application of psychology to clinical work has been very influential.

Partly in reaction to the subjective and introspective nature of Freudian psychology, and its focus on the recollection of childhood experiences, during the early decades of the 20th century behaviorism gained popularity as a guiding psychological theory. Championed by psychologists such as John B. Watson and Edward Thorndike (and later, B.F. Skinner), behaviorism was

grounded in studies of animal behavior. Behaviorists argued that psychology should be a science of *behavior*, **not** the mind, and rejected the idea that internal mental states such as beliefs, desires, or goals could be studied scientifically. In his paper "Psychology as the Behaviorist Views It" (1913), Watson argued that psychology "is a *purely objective* [emphasis added] experimental branch of natural science," that "introspection forms no essential part of its methods", and that "the behaviorist recognizes no dividing line between man and brute."

Behaviorism reigned as the dominant model in psychology through the first half of the 20th century, largely due to the creation of conditioning theories as scientific models of human behavior, and their successful application in the workplace and in fields such as advertising.

Modern era

However, it became increasingly clear that although behaviorism had made some important discoveries, it was deficient as a guiding theory of human behavior. Noam Chomsky's review of Skinner's book *Verbal Behavior* (that aimed to explain language acquisition in a behaviorist framework) is considered one of the major factors in the ending of behaviorism's reign. Chomsky demonstrated that language could not purely be learned from conditioning, as people could produce sentences unique in structure and meaning that couldn't possibly be generated solely through experience of natural language, implying that there must be internal states of mind that behaviorism rejected as illusory. Similarly, work by Albert Bandura showed that children could learn by social observation, without any change in overt behavior, and so must be accounted for by internal representations.

Humanistic psychology emerged in the 1950s and has continued as a reaction to positivist and scientific approaches to the mind. It stresses a phenomenological view of human experience and seeks to understand human beings and their behavior by conducting qualitative research. The humanistic approach has its roots in existentialist and phenomenological philosophy and many humanist psychologists completely reject a scientific approach, arguing that trying to turn human experience into measurements strips it of all meaning and relevance to lived existence.

Some of the founding theorists behind this school of thought were Abraham Maslow who formulated a hierarchy of human needs, Carl Rogers

who created and developed Client-centred therapy, and Fritz Perls who helped create and develop Gestalt therapy.

The rise of computer technology also promoted the metaphor of mental function as information processing. This, combined with a scientific approach to studying the mind, as well as a belief in internal mental states, led to the rise of cognitivism as the dominant model of the mind.

Links between brain and nervous system function were also becoming common, partly due to the experimental work of people like Charles Sherrington and Donald Hebb, and partly due to studies of people with brain injury (see cognitive neuropsychology). With the development of technologies for accurately measuring brain function, neuropsychology and cognitive neuroscience have become some of the most active areas in contemporary psychology. With the increasing involvement of other disciplines (such as philosophy, computer science and neuroscience) in the quest to understand the mind, the umbrella discipline of cognitive science has been created as a means of focusing such efforts in a constructive way.

From Wikipedia, the free encyclopedia

<http://en.wikipedia.org/wiki/Psychology>

18 Januari 2007

1. In what way does Psychology differ from biology and neuroscience?
 - A. Studying the biological process
 - B. Studying the neural process
 - C. It is primarily concerned with the interaction of mental process and behaviour on 2 systematic level
 - D. Seeking to explain the mental process and behaviour of individuals

2. Who popularised the term psychology ?
 - A. Christian wolff
 - B. Marko Marulie
 - C. Maine de Biran
 - D. Rudolf Goeckel

3. When was psychology regarded as a branch of philosophy ?
 - A. 20th century
 - B. 19th century

- C. 18th century
 - D. 17th century
4. Who developed psychoanalysis ?
- A. Wilhelm wundt
 - B. John B.Watson
 - C. Sigmund Freud
 - D. William James
5. When did behaviourism become dominant model in psychology ?
- A. 17th
 - B. 18th
 - C. 19th
 - D. 20th century
6. Who said that language could not purely be learned from conditioning ?
- A. Chamsky
 - B. Albert Bandura
 - C. Abraham Maslow
 - D. Carl Rogers
7. Originally, the word psychology means a study of
- A. brain
 - B. soul
 - C. behaviour
 - D. mind
8. What was Freud's understanding of the mind based on ?
- A. Internal mental states
 - B. Resolving mental distress
 - C. Interpretive methods and introspection
 - D. Psychopathology
9. Where does behaviourism apply successfully ?
- A. Education
 - B. Military

- C. Government
- D. Advertising

10. What is deficient as a guiding theory of human behaviour ?
- A. Psychopathology
 - B. Social observation
 - C. Philosophy
 - D. Behaviourism

Petunjuk Jawaban Latihan

Exercise 1

- 1. A
- 2. D
- 3. C
- 4. B
- 5. A
- 6. C
- 7. B
- 8. D
- 9. A
- 10. C

Exercise 3

- 1. C
- 2. A
- 3. B
- 4. C
- 5. D
- 6. A
- 7. B
- 8. C
- 9. D
- 10. D

Exercise 2

- 1. C
- 2. D
- 3. B
- 4. A
- 5. A
- 6. D
- 7. B
- 8. C
- 9. D
- 10. B



Scanning adalah strategi membaca yang sangat diperlukan bila Anda ingin mencari informasi yang diperlukan dengan cepat. Oleh karena itu Anda dapat langsung mencarinya tanpa perlu membaca seluruh teks.



COMPARING MEDIEVAL AND RENNAISSANCE PAINTINGS

In the following essay I shall compare and contrast paintings from the medieval and renaissance period. Medieval paintings were very realistic and precise. The king in the painting is in the middle, and anything painted in the middle is the center of attraction or the important object in the painting. To prove this theory, I looked at the painting and the first thing that caught my eye is the king. The human body is not too detailed but the actions they are doing or intend to do are very clear. The painter created visual space in this painting in a very witty way; he painted pillars and ceiling ornaments, which is an indication of height and space. I think it is a very successful method because the person who is looking at the painting has space to look around. The painting in my opinion is more realistic than naturalistic because I think he attended the ceremony and then painted what he remembered.

In the following paragraph I shall briefly describe the renaissance painting. This painting is based on the story of a poor man who couldn't pay his taxes. Then Jesus told him to go to a certain place where he should cut open a fish and there he shall find a silver coin to pay his taxes with. He did so and paid his taxes. On the left of the painting you can see the barrel of fish, one of the fish is where he got the silver coin. In the middle Jesus is explaining the situation to the people. Masaccio always painted the most important things in the middle. On the right the man is paying his taxes.

There are many things that the two paintings had in common some of the reasons are: It is similar in the layout, A good example would be the objects in the middle. Jesus and the king are in the middle and obviously they are the main characters in the painting. There is also lots of visual space on both paintings e.g.: mountains, pillars. This is the case because the renaissance is

the rebirth of the classics and the classics were basically the medieval paintings. So the renaissance paintings were in a way based on the medieval ones.

Renaissance paintings also differed from medieval ones. The Renaissance painting is laid out in a way which tells a story, however the medieval one is showing an event which is virtually a fact or a point. The Renaissance painting shows more detail than the medieval one and better use of color. The people in the Renaissance painting are more detailed and are more colorful. The purpose of both paintings differed greatly. The Renaissance painting focuses on telling a tale, everyday basic life nature, religion and wonders but the medieval painting consists of royalty, high class and leadership because of its tone and theme.

In conclusion I would like to state that both paintings obviously had different philosophies and that Renaissance paintings were definitely based on medieval ones.

<http://www.antiessays.com/free-essays/30.html>

Tanggal 29 Nov 2006

- 1) In a medieval painting, who is usually in the middle?
 - A. Jesus
 - B. the Queen
 - C. the King
 - D. Poor man

- 2) Who always painted the most important things in the middle?
 - A. Massacio
 - B. Potaccio
 - C. Crustaccio
 - D. Pinoccio

- 3) According to the writer, the medieval paintings are?
 - A. naturalistic
 - B. wholistic
 - C. fantastic
 - D. realistic

- 4) What does the writer think a successful method?
 - A. visual space the painter created
 - B. ceilings the painter created
 - C. ornaments the painter created
 - D. pillars the painter created

- 5) Renaissance paintings ...
 - A. show an event
 - B. show a fact
 - C. tell a story
 - D. show a point

- 6) Medieval paintings consist of
 - A. religions
 - B. royalty
 - C. wonders
 - D. everyday life

- 7) What is the similarity between the medieval and Renaissance paintings?
 - A. the layout
 - B. the colour
 - C. the detail
 - D. the material

- 8) Why does the writer say that medieval paintings are precise?
 - A. the human body is detailed
 - B. the center of attraction is in the middle
 - C. the painters painted what they remembered
 - D. what they are doing is clear

Cocokkanlah jawaban Anda dengan Kunci Jawaban Tes Formatif 1 yang terdapat di bagian akhir modul ini. Hitunglah jawaban yang benar. Kemudian, gunakan rumus berikut untuk mengetahui tingkat penguasaan Anda terhadap materi Kegiatan Belajar 1.

$$\text{Tingkat penguasaan} = \frac{\text{Jumlah Jawaban yang Benar}}{\text{Jumlah Soal}} \times 100\%$$

Arti tingkat penguasaan: 90 - 100% = baik sekali

80 - 89% = baik

70 - 79% = cukup

< 70% = kurang

Apabila mencapai tingkat penguasaan 80% atau lebih, Anda dapat meneruskan dengan Kegiatan Belajar 2. **Bagus!** Jika masih di bawah 80%, Anda harus mengulangi materi Kegiatan Belajar 1, terutama bagian yang belum dikuasai.

KEGIATAN BELAJAR 2

Scanning 2

EXERCISE 4

Read the following article and answer the questions!

EDUCATION**Terminology**

The word *education* is derived from the Latin *educare* (with a short *u*) meaning "to raise", "to bring up", "to train", "to rear", via "educatio/nis", bringing up, raising. In recent times, there has been a return to, an alternative assertion that education derives from a different verb: *educere* (with a long *u*), meaning "to lead out" or "to lead forth". There is an English word from this verb, "eduction": drawing out. This is considered by some to be a false etymology, used to bolster the theory that a function of education is to develop innate abilities and expand horizons.

Philosophy of education

The philosophy of education is the study of the purpose, nature and ideal content of education. Related topics include knowledge itself, the nature of the knowing mind and the human subject, problems of authority, and the relationship between education and society. At least since Rousseau's time, the philosophy of education has been linked to theories of developmental psychology and human development.

Fundamental purposes that have been proposed for education include:

1. The enterprise of civil society depends on educating young people to become responsible, thoughtful and enterprising citizens. This is an intricate, challenging task requiring deep understanding of ethical principles, moral values, political theory, aesthetics, and economics, not to mention an understanding of who children are, in themselves and in society.
2. Progress in every practical field depends on having capacities that schooling can educate. Education is thus a means to foster the

individual's, society's, and even humanity's future development and prosperity. Emphasis is often put on economic success in this regard.

3. One's individual development and the capacity to fulfill one's own purposes can depend on an adequate preparation in childhood. Education can thus attempt to give a firm foundation for the achievement of personal fulfillment. The better the foundation that is built, the more successful the child will be. Simple basics in education can carry a child far.

The nature, origin and scope of knowledge

A central tenet of education typically includes “the imparting of knowledge.” At a very basic level, this purpose ultimately deals with the nature, origin and scope of knowledge. The branch of philosophy that addresses these and related issues is known as epistemology. This area of study often focuses on analyzing the nature and variety of knowledge and how it relates to similar notions such as truth and belief.

While the term, *knowledge*, is often used to convey this general purpose of education, it can also be viewed as part of a continuum of knowing that ranges from very specific data to the highest levels. Seen in this light, the continuum may be thought to consist of a general hierarchy of overlapping levels of knowing. Students must be able to connect new information to a piece of old information to be better able to learn, understand, and retain information. This continuum may include notions such as data, information, knowledge, wisdom, and realization.

Psychology of education

Educational psychology is the study of how humans learn in educational settings, the effectiveness of educational interventions, the psychology of teaching, and the social psychology of schools as organizations. Although the terms "educational psychology" and "school psychology" are often used interchangeably, researchers and theorists are likely to be identified as educational psychologists, whereas practitioners in schools or school-related settings are identified as school psychologists. Educational psychology is concerned with the processes of educational attainment in the general population and in sub-populations such as gifted children and those with specific disabilities.

Educational psychology can in part be understood through its relationship with other disciplines. It is informed primarily by psychology, bearing a relationship to that discipline analogous to the relationship between medicine and biology. Educational psychology in turn informs a wide range of specialities within educational studies, including instructional design, educational technology, curriculum development, organizational learning, special education and classroom management. Educational psychology both draws from and contributes to cognitive science and the learning sciences. In universities, departments of educational psychology are usually housed within faculties of education, possibly accounting for the lack of representation of educational psychology content in introductory psychology textbooks (Lucas, Blazek, & Raley, 2006).

Academic disciplines

An academic discipline is a branch of knowledge which is formally taught, either at the university, or via some other such method. Functionally, disciplines are usually defined and recognized by the academic journals in which research is published, and by the learned societies to which their practitioners belong. Professors say schooling is 80% psychological, 20% physical effort.

Each discipline usually has several sub-disciplines or branches, and distinguishing lines are often both arbitrary and ambiguous. Examples of broad areas of academic disciplines include the natural sciences, mathematics, computer science, social sciences, humanities and applied sciences.

From Wikipedia, the free encyclopedia
<http://en.wikipedia.org/wiki/Education>
18 Januari 2007

1. Educere means.....
 - A. to raise
 - B. to lead forth
 - C. to bring up
 - D. to rear

2. School psychologists are....
 - A. researchers
 - B. theorists
 - C. teacher
 - D. practitioners

3. Educational psychology contributes to ...
 - A. cognitive science
 - B. classroom management
 - C. educational technology
 - D. special education

4. Education means
 - A. leading out
 - B. bringing up
 - C. drawing out
 - D. raising

5. Education closely relates to
 - A. future development
 - B. achievement of personal fulfillment
 - C. prosperity
 - D. economic progress

6. The enterprise of civil society requires deep understanding of
 - A. human development
 - B. moral values
 - C. developmental psychology
 - D. philosophy of education

7. Analysing the nature and variety of knowledge are studied by
 - A. epistemology
 - B. educational psychology
 - C. educational technology
 - D. philosophy technology

8. The lie about the function of education is to
 - A. develop innate abilities
 - B. prepare you to gain a higher position
 - C. gain knowledge
 - D. expand horizons

9. Discipline analogies to the relationship between educational psychology and psychology is between
 - A. medicine and biology
 - B. philosophy and epistemology
 - C. mathematics and economics
 - D. geography and geology

10. Educational psychology excludes
 - A. classroom management
 - B. organisational learning
 - C. human development
 - D. curriculum development



EXERCISE 5

Read the following article and answer the questions!

MYSTERIOUS CANCER

Researchers agree that space radiation can cause cancer. They're just not sure how

May 9, 2005: Despite urgent warnings from Hollywood, double-jawed aliens are probably not a spacefarer's biggest risk. Radiation is worse. It shreds not flesh, but DNA molecules, and that can cause a multitude of problems. One big one: it can lead to cancer.

Oddly enough, according to cancer specialists Dr. John Dicello of the John Hopkins University School of Medicine, radiation "is relatively poor at inducing cancer." Chemicals, he says, can do far more damage, as shown by

the strong tie between environmental contaminants and increased levels of cancer.

But for space travelers, radiation is a tremendous worry. That's because astronauts are exposed to far more radiation than we typically encounter on Earth. And it's a different kind of radiation. Cosmic rays from deep space, for instance, are composed of heavier particles than our bodies are used to, and they have little trouble breaking strands of DNA.

Broken DNA, by itself, is not necessarily cause for alarm, DNA strands break all the time. Even a physical blow will do it. "If you hit yourself with a hammer," notes Dicello, "that can do a lot more damage than most radiation exposures." Because this kind of damage occurs so frequently, the body has evolved mechanisms to handle it.

Sometimes, he explains, cells with damaged DNA simply destroy themselves. Other times, they try to repair the damage. Problems start when they do this incorrectly. They might, for example, insert a chunk of DNA in the wrong place. Or they might attach it to the wrong chromosome.

When that happens, it's possible that the mistake will let the cell ignore constraints designed to make cells behave. A cancer can start when altered genes allow the cell and its descendants to multiply too freely.

So far the story sound simple; Radiation damages DNA. Repairs are bungled. Cancer ensues.

But it's not so simple, says Dicello, not at all. Radiation can affect human tissue in unpredictable ways, and the chain of events leading from radiation to cancer is vexingly complex. "If I really understood it, I'd probably win the Nobel Prize."

Consider the following: Some astronauts, veterans of long space missions, have "significant chromosome aberrations" in their blood cells. These aberrations may be "associated with the development of cancer." Says Dicello, but they do not, by themselves, cause cancer. For that to happen, cells with aberrations must undergo a series of further mutations. According to the National Cancer Institute, "the number of cell divisions that occur during this process can be astronomically large-human tumors often become apparent only after they have grown to a size of 10 to 100 billion cells. Years even decades, might pass between the onset of the problem, the exposure to radiation, and the appearance of a tumor.

Because of the delay, it's very difficult to determine exactly when or why a cancer starts. That's the bad news.

The good news for astronauts and for the rest of us is that there are many places along this slow developmental path at which an incipient cancer can be stopped. Indeed, researchers have pinpointed some of the genes involved and they're working on treatments targeted directly at those genes.

Understanding how to stop the cancer, however, doesn't necessarily tell us how it starts.

Cells often react in unexpected ways to radiation, notes Dicello. For example, there's a puzzling phenomenon known as adaptive response. Sometimes, when tissue is exposed to damaging radiation, it not only repairs itself, but also learns to repair itself better next time. How that works is still being investigated.

Furthermore, radiation damage is not always proportional to the amount of radiation experienced. "Our research shows unusual things," says Dicello. Some types of chromosome aberrations are very sensitive to radiation. "Deliver a low dose, and they take off." Other types of aberrations require much higher doses. Researchers are still trying to sort out which is which...and why?

These uncertainties make it hard to predict how human tissue will react to space radiation. Astronauts, points out Dicello, will encounter at least two kinds of radiation: (1) high-energy cosmic rays from distant exploding stars and (2) less-energetic protons and protons from flares on our own sun and they can be exposed to both at the same time.

While researchers know something about how cells respond to each kind of radiation separately, some of Dicello's work suggests that exposures to these two types of radiation mixed together could produce as-yet unpredictable results.

The damage could be less than the two kinds added together or it could be more! There could, perhaps, be an adaptive response in which lightweight solar protons stimulate repair processes to help reduce the effects of the heavy cosmic ray ions. Or something totally unexpected could happen.

There's still a lot to learn. Dicello lists some of the questions: "How important is adaptive response? How important is the effect of cells on each other? How important are antioxidants? We don't yet know." "The answers are important to everyone," he adds. Understanding how the body deals with damaged DNA could help doctors prevent complications from the radiation treatments given to cancer patients. It might help them deal with the

fallout from, say, a terrorist's dirty bomb or DNA problems caused by environment or chemical pollution.

Eventually, Dicello believes, researchers will figure it out. And when that happens, people on earth will benefit at least as much as people in space....who can then turn to lesser worries, like double-jawed aliens.

1. What can effect human tissues in unpredictable ways?
 - A. chemicals
 - B. sunlight
 - C. cosmic rays
 - D. radiation

2. Cells often react in unexpected ways to
 - A. sunlight
 - B. radiation
 - C. chemicals
 - D. cosmic rays

3. What does radiation shred ?
 - A. flesh
 - B. human tissues
 - C. DNA molecules
 - D. human cells

4. Human tumors often become apparent only after they have grown to a size of
 - A. 10 to 100 billion cells
 - B. 10 to 100 cells
 - C. 10 to 1000 cells
 - D. 10 to 10 billion cells

5. How many kinds of radiation will astronauts encounter ?
 - A. 4
 - B. 3
 - C. 2
 - D. 1

6. Cells with aberrations can cause cancer if they undergo a series of further...
 - A. problems
 - B. mutations
 - C. constraints
 - D. divisions

7. When the researchers work on car treatments, what do they target ?
 - A. molecules
 - B. tissues
 - C. cells
 - D. genes

8. A cancer can start when
 - A. altered genes allows the cell and its descendants to multiply too freely
 - B. the genes multiply too freely
 - C. the body is exposed to radiation
 - D. significant chromosome aberrations ensue

9. Significant chromosome aberrations are found in ...
 - A. Human tissues
 - B. genes
 - C. blood cells
 - D. DNA molecules

10. What does Dicello call a puzzling phenomenon ?
 - A. adaptive response
 - B. radiation damage
 - C. different chromosome aberrations
 - D. unpredictable results of radiation exposure

**EXERCISE 6**

Read the following article and answer the questions!

Bungee Jumping

Bungee jumping is an extreme sport which implies jumping in the open, tied by the legs with an elastic cord. Launching is being made from cranes, bridges and other facilities, but not buildings, because the swinging on the horizontal may have an amplitude of 15 m. After the jump follow some stretches and eases of the cord on the vertical.

This activity isn't as dangerous as it seems. Statistically speaking, it is as dangerous as a 100 km car trip. The risk rate is 2 per million. Accidents are very rare and they happen if the cord isn't well tied or, as it happened in some countries, isn't tied at all. Still this sport isn't recommended to those who have heart or back problems, and it also may unstick the retina to those who have eye diseases.

The falling takes only about 5-6 minutes, but they are lived to the maximum. After that comes the rebound, which brings as well great sensations. Some say the rebound is the best part. The free falling may be compared to the falling in parachutism. The origin of this sport is in Vanuatu Islands from the Pacific Ocean, where there's a similar ritual called "gkol". It's said that it all started from a married couple. The woman ran and climbed into a tree. Followed by the husband, she threw herself in the air, but with a lian tied to her legs. It seems that the idea was liked very much by local people, and they soon started to jump the same way.

The first time that the accidental world found out about this habit was in 1970, when The National Geographic magazine published a story about the vanuatu people and their ritual. This practice was rapidly adopted by the civilised world. The first jump was made by some britishmen on April 1 1977 from the Clifton Bridge in the U.K..They were immediately arrested, but later there were reports about them. From now on this sport was to become more and more popular. In 1987 it has been founded the first jumping facility open for the public. The highest of them is in South Africa and it has 200 m height. The record in the domain is held by Jochen Schwizer, who jumped from an helicopter flying at 1000 m over the earth with a cord of 300 m.

To amplify the sensations to the maximum, some jump with different heavy objects which they release when they reach the maximum point of the stretching. Others calculate with precision the length of the cord so that they can reach the furthest point. Many couples have jumped together, tied to the same rope. The Kochelman brothers are ones of the most famous bungee stunters. One of them projected the scene from the movie “The Specialist” with Sylvester Stallone. The stunt represented the jump with a cord from a barage. The cord was erased on the computer. Bungee jumping is one of the most popular extreme sports and it brings one of the biggest doses of adrenaline.

<http://www.antiessays.com/free-essays/1751.html>

29 November 2006

1. What is the risk rate of bungee jumping ?
 - A. 4 per million
 - B. 3 per million
 - C. 2 per million
 - D. 1 per million

2. When was first jump made ?
 - A. 1974
 - B. 1975
 - C. 1976
 - D. 1977

3. Where was the highest jump made ?
 - A. Vanuatu islands
 - B. South Africa
 - C. Britain
 - D. America

4. Who are the most famous bungee stunters ?
 - A. the Kochelman brothers
 - B. Britishmen
 - C. Sylvester stallone
 - D. Jochen Schwizer

5. How many meters are the amplitude of the swinging on the horizontal ?
 - A. 14m
 - B. 15m
 - C. 16m
 - D. 17m

6. What is the most sensation in bungee jumping ?
 - A. the jumping itself
 - B. the swinging
 - C. the stretch
 - D. the rebound

7. When did the the world know about the habit of the Vanuatu people and their ritual ?
 - A. 1970
 - B. 1972
 - C. 1973
 - D. 1977

8. What did Jochen Schwizer jump from ?
 - A. a cliff
 - B. a helicopter
 - C. a building
 - D. a bridge

9. When was the first jumping facility open for public ?
 - A. 1987
 - B. 1977
 - C. 1970
 - D. 1967

10. How high is the highest jump ?
 - A. 100m
 - B. 200m
 - C. 300m
 - D. 400m

Petunjuk Jawaban Latihan

Exercise 4

1. B
2. D
3. A
4. C
5. D
6. B
7. A
8. B
9. A
10. C

Exercise 5

1. D
2. B
3. C
4. A
5. C
6. B
7. D
8. A
9. C
10. A

Exercise 6

1. C
2. D
3. B
4. A
5. B
6. D
7. A
8. B
9. A
10. B



Untuk menjawab pertanyaan-pertanyaan di atas Anda perlu memahami terlebih dahulu pertanyaannya, baru Anda cari informasinya dalam teks. Cara mencarinya adalah berdasarkan pilihan jawaban yang ada, misalnya: bila yang ditanyakan tahun, maka carilah angka-angka yang menunjukkan tahun di dalam teks tersebut.



DA VINCI

I chose Leonardo Da Vinci as the greatest renaissance personality. I chose Da Vinci because he made many contributions to the time period. Da Vinci was an artist, a scientist, and a philosopher. A lot of the famous artists and thinkers of the time weren't recognized as being great for many years after their death. The kings and other important people of the time recognized Da Vinci as a great artist. This is why I chose Da Vinci as the greatest renaissance personality.

Leonardo Da Vinci was born in 1452 on his father's estate in Vinci, Italy. At 15 his father had noticed Leonardo's potential and had decided to send him to be an apprentice to the artist Andrea del Verrocchio in Florence. This was also when he first developed an interest in anatomy. In 1482, Leonardo was hired by the duke of Milan, Ludovico Sforza, to be artist and engineer. He stayed in Milan for seventeen years. There he completed five paintings: two portraits of the 'Last Supper', two versions of 'The Virgin of the Rocks', and a decorative ceiling painting in the Castello Sforzesco.

In Florence, he was commissioned to do a number of paintings, but other interests and tasks kept him from finishing them. The most well known piece to survive from this time period was the famous "Mona Lisa". During the years 1513 to 1516, Leonardo was in Rome at the invitation of Cardinal Giuliano de' Medici, brother of Pope Leo X. His work in painting and sculpture over the next seven years remained mostly in the planning stage. But his scientific work flourished. He continued his notebooks with

observations and drawings of human anatomy, optics, mechanics, and botanical studies.

In 1516, at the age of 65, he accepted an invitation from Francis I, king of France, to leave Italy and work for him. Leonardo spent the last three years of his life in the palace of Cloux, near the king's residence at Amboise, near Tours. He was given the title of "first painter, architect, and mechanic of the King" and given freedom of action in what he wanted to do. No matter where you go in the world, everyone knows of the "Mona Lisa". The picture is on stamps, shirts, posters, and just about anything else you can think of. It one of the most well renowned paintings in the world. This piece is unusual because of the mystery of the painting. To this day no one knows whether the woman in the painting was a real person, or whether it was Leonardo's vision of himself as a women.

Leonardo Da Vinci had a very strong influence over the world, artistically and scientifically. Leonardo devised plans for prototypes of an airplane and a helicopter. His extensive studies of human anatomy were shown in anatomical drawings, were among the most significant achievements of Renaissance Science. Due to Leonardo's remarkable illustrations, European artists began to study the model of nature more closely and to paint with the goal of great realism. They learned to create lifelike people and animals, and they became skilled at creating the illusion of depth and distance on flat walls and canvases by using the techniques of perspective. He is deservedly considered one of the greatest painters of all time. This is why I think he is the greatest renaissance personality.

<http://www.antiessays.com/free-essays/32.html>

Tanggal 29 Nov 2006

- 1) When was Da Vinci born?
 - A. 1452
 - B. 1483
 - C. 1513
 - D. 1516

- 2). How long did Da Vinci spend his time in the Palace of Cloux?
 - A. 1
 - B. 2
 - C. 3
 - D. 4 years

- 3) How did Da Vinci's strong influence have over the world?
 - A. closely
 - B. scientifically
 - C. beautifully
 - D. philosophically

- 4) How long did Da Vinci stay in Milan?
 - A. 15
 - B. 16
 - C. 17
 - D. 18 years

- 5) Who hired Da Vinci to be artist and engineer?
 - A. Ludovico Sforza
 - B. Pope Leo X
 - C. Guiliano de Medici
 - D. Francis I

- 6) When did Da Vinci develop an interest in anatomy? When
 - A. he worked for Guiliano de Medici
 - B. he was an apprentice to Andrea del Verrochio
 - C. he was staying in Milan
 - D. he was stayinng in France

- 7) Who recognised his potential?
 - A. Ludovico Sforza
 - B. Francis I
 - C. his father
 - D. Andrea del Verrochio

- 8) Among his works, which one is flourished?
 - A. his paintings
 - B. his sculpture
 - C. his drawings
 - D. his scientific work

- 9) Why do the writer considers "Mona Lisa" as unusual? Because of
 - A. the technique
 - B. the mystery of th epainting
 - C. the picture
 - D. the colour

- 10) During his stay in Milan, how many paintings did he complete?
- A. 5
 - B. 6
 - C. 7
 - D. 8

Cocokkanlah jawaban Anda dengan Kunci Jawaban Tes Formatif 2 yang terdapat di bagian akhir modul ini. Hitunglah jawaban yang benar. Kemudian, gunakan rumus berikut untuk mengetahui tingkat penguasaan Anda terhadap materi Kegiatan Belajar 2.

$$\text{Tingkat penguasaan} = \frac{\text{Jumlah Jawaban yang Benar}}{\text{Jumlah Soal}} \times 100\%$$

Arti tingkat penguasaan: 90 - 100% = baik sekali

80 - 89% = baik

70 - 79% = cukup

< 70% = kurang

Apabila mencapai tingkat penguasaan 80% atau lebih, Anda dapat meneruskan dengan modul berikutnya. **Bagus!** Jika masih di bawah 80%, Anda harus mengulangi materi Kegiatan Belajar 2, terutama bagian yang belum dikuasai.

Kunci Jawaban Tes Formatif

Tes Formatif 1

- 1) C
- 2) A
- 3) D
- 4) A
- 5) C
- 6) B
- 7) A
- 8) D

Tes Formatif 2

- 1) A
- 2) C
- 3) B
- 4) C
- 5) A
- 6) B
- 7) C
- 8) D
- 9) B
- 10) A

Daftar Pustaka

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