

Re-designing Man: Science + Human Values

Unit 2. Breeding Tomorrow's Man.

Content Summary:

The filmstrip opens with a futuristic dramatization of a couple visiting a "National Eugenics Breeding Council" for advice on avoiding a tax by using governmentally pre-selected sperm to have a child. The frames which follow define eugenics and raises questions that a eugenics-practicing society would have to answer: Should the ideal person give orders well? Or follow them? Should governments decide who breeds? Then, there is traced, historical schemes for selective breeding and an explanation is given of the paradox of genetic load, or the buildup of inferior genes resulting from efficient modern medicine--noting that this paradox poses some difficult questions for society: Should people with genetic defects be prohibited from breeding? Frames 28-40 of the filmstrip notes some prior governmental regulation of breeding, focusing on the negative eugenics programme of Adolf Hitler and the question of whether scientists should decide "the good of mankind". The filmstrip surveys existing genetic counseling plans and describes such genetic diseases as P. K. U., Huntington's Chorea, and Mongolism -- plus amniocentesis, a technique for discovering genetic problems pre-natally. This is followed by a dramatized conversation among three doctors arguing eugenic considerations, such as intelligence and race. We are made to recall *G. B. Shaw's humorous comment to a famous actress, which in fact exposes a flaw in eugenics plans; the filmstrip content continues with a discussion on the use of sperm and egg banks, and concludes with broad, open-ended questions about the present and future impact of possible eugenic decisions.

*(Shaw's comment is as follows:-

The beautiful dancer-actress, Isadora Duncan in proposing marriage to Shaw, wrote: "Think of our children. With my body and your brains"

Replied Shaw: "But what if they have my body and your brains?"

Objectives:

Students should be able to explain eugenics and the paradox of genetic load, expressing their own reactions to that paradox.

Students should be able to list and discuss widely-held social values that would be affected by eugenics programmes.

Students should be able to distinguish between planned and natural selection.

Students should be able to compare forced and voluntary eugenics programmes in the context of their own value systems.

Students should be able to explain genetic counseling and react to the existing and potential effects of new techniques for treating and diagnosing genetic defects.

Students should be able to discuss and speculate on possible long-range effects of planned breeding decisions, recognizing the gravity of such decisions. They should indicate realization that such decisions affect them at an acutely personal level.

Social Science/Humanities Questions:

1. Genetic counseling exists today, usually on a voluntary basis. Should it be made mandatory? Will it be, in your opinion? If it were required, what other actions would be required of individuals found to have a high probability of passing on a genetic disease? What other actions should be required?
2. Critics point out that thousands of sterilizations have been conducted in the United States under the auspices of the Health, Education and Welfare Dept.--some without the informed consent of the individuals involved. These appear to be motivated largely by economic concerns related to population control. What groups do you think would be most likely to be the subjects of such programmes? Do you think any legal guidelines or restrictions are needed to regulate such practices? If so, how should they be drafted?

3. Currently, tax credits are given to families according to the number of children they have. This practice reflects the fact that families are the primary institution for rearing children, and therefore perform a necessary social function economically (the amounts saved on taxes don't begin to cover the costs of child-rearing.) Do you think this situation might change in the future? Might it even be reversed? What pressures might cause such a change? Would it indicate a change in our social values? Do you think there should be a change?
4. What might be the effects of a eugenics programme on the family? On the individual? What kinds of controls might a society use to enforce planned breeding?
5. Eugenics literally means "good genes;" hence a eugenics programme is intended to breed good genes. But what are good genes? Does our society provide answers to this question? What kind of "better man" would our society breed? What are your personal views on the subject?

Scientific Questions:

1. Distinguish between natural selection and directed evolution. Into which category does a eugenics programme fall? What are some of the dangers of directed evolution? Is extinction a possibility? Can you cite any evidence to support your opinion?
2. Would a eugenics programme guarantee the breeding of specific traits? Why or why not? What kinds of traits would be easiest to breed? What kinds would be most difficult?
3. Is there such a thing as social evolution? Explain fully.

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