## Designer Babies When Should New Technologies be used to Change the Gene Pool

With advances in cell biology, embryology, and molecular biology, scientists are able to identify phenotypes (traits) in embryos and even sperm and egg cells. The power of the technologies can be applied in a variety of ways.

It is obvious why couples would want to check for "healthy" sex cells and embryos. Being able to test for enzyme deficiencies (i.e. PKU) or chromosome abnormalities (i.e. Down's Syndrome) allows parents to decide how they might handle a pregnancy with a child that has one of these conditions. But now, less life-threatening phenotypes can also be identified early in the reproductive process. Easily determined is the sex of an embryo. This is called gender selection.

Many parents say that as long as their baby is healthy that they don't care if it is a boy or girl. But many parents do care. In some cultures, having a baby of one sex but not the other is celebrated. In fact, it has been reported that it is common in some countries to give away or even kill babies that are born, "the wrong sex".

How do you feel about gender selection? Is it every justifiable? When? Would you want to be able to select the sex of your babies? How much would you be willing to pay for it?

To Do: Using the Internet, find out more gender selection techniques.

Examine your own beliefs regarding gender selection technologies.

- 1. Go to <a href="http://www.wired.com/wiredscience/2009/03/designerdebate/">http://www.wired.com/wiredscience/2009/03/designerdebate/</a> and read the article on gender selection.
- 2. Create a new page in your notebook and complete steps 3-6.
- 3. While reading the article, list the medical or scientific technologies used to determine characteristics and what they are used for.
- 4. Write a position statement as to whether or not you would want to predetermine the sex of your child. If so, why? List a reason some other couple might want to be able to do so. Conversely, if you would not want to be able to select the gender of your offspring, why not? Give one reason why others might want to?
- 5. In addition to choosing the sex of your child, are there other traits that you'd want your child to possess? List three other characteristics a couple might want to predetermine in their offspring and why? Even if you do not support trait selection, what three characteristics would you understand that others might want to predetermine and why?
- 6. Gender selection is not cheap. Find a website for a gender selection service. How much do

they charge? How much would you be willing to spend?

If you have questions email tdoss@seq.org.