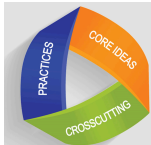


Revelatory Insight into Enhancing Our Beings and Human Features

Neuroscience, Artificial Intelligence,
and the Soul



NGSS Instructional Outcomes

Next Generation Science Standards

Science and Engineering Practices

Asking Questions and Defining Problems: Students explore the ethical and philosophical questions raised by human enhancement technologies.

Engaging in Argument from Evidence: Debating the merits and drawbacks of transhumanism based on religious, ethical, and scientific evidence.

Crosscutting Concepts

Cause and Effect: Understanding how advancements in technology can have profound effects on society and human identity.

Systems and System Models: Analyzing the human body and society as systems that are impacted by technological advancements.

LS4: Biological Evolution: Examining the concept of human evolution in the context of transhumanism and contrasting it with religious views.

ETS1: Engineering Design: Considering the implications of designing technologies that alter human capabilities and the ethical boundaries involved.



CCSS Instructional Outcomes

Common Core State Standards

English Language Arts Standards

CCSS.ELA-LITERACY.RST.11–12.1: Citing specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

CCSS.ELA-LITERACY.SL.11–12.1: Engaging effectively in a range of collaborative discussions on complex topics, texts, and issues.

History/Social Studies Standards

CCSS.ELA-LITERACY.RH.11–12.7: Integrating and evaluating multiple sources of information presented in diverse formats and media in order to address a question or solve a problem.

CCSS.ELA-LITERACY.RH.11–12.9: Comparing and contrasting treatments of the same topic in several primary and secondary sources.

Content Learning Outcomes:

Identify key components of transhumanist ideology.

Distinguish between Islamic theological perspectives on human enhancement, its purposes, and secular bio-scientific views.

Apply scriptural and scientific concepts to evaluate the uses of biomedical technologies to 'change' the human body.

Materials

Instruction/Teacher Facilitation: Slides 4.20–4.29

Triple-Entry Vocabulary Journal (Student responsibility)

Supplemental Material: Video Clips for Activity:

1. Mandalorian - "Fennec's Cybernetic Implants" - Book of Boba Fett S01E04 Clip

2. Avatar (the first one) - Scene From Avatar Number 2

3. Avatar (to be shown in connection with previous scene)

Lesson 4.3 Assessment

Instruction/Teacher Facilitation: Slides for Lesson 3.2

- **Slide 4.20.** Transhumanism
- **Slide 4.21.** The Journey of Our Souls
- **Slide 4.22.** Views on Humans
- **Slide 4.23.** Changing Allah's Creation
- **Slide 4.24.** Allah Created Humans in the Best of Forms
- **Slide 4.25.** No Immortality in This Life
- **Slide 4.26.** But There is Immortality in Another Life
- **Slide 4.27.** Recasting Stories to Make Them More Islamic
- **Slide 4.28.** Discussions and Reflections
- **Slide 4.29.** Deep Reflections

Instruction/Teacher Facilitation

In this unit, so far, we have discussed the concept of transhumanism and further discussed the elements of treatment/therapy versus enhancement, which are all aspects of changing the human body.

We looked at the elements of transhumanism earlier, and now we will look at the ideology behind transhumanism. There are some fundamental ideas behind transhumanism of what a human being actually is, and what the purpose of a human is. These ideas define the way that transhumanism takes shape and what these scientists believe can and should be done. This lesson’s goal is to identify those ideas backing transhumanism and see if, and how, these ideas match up with Islamic values and principles.

Slide 4.20: Transhumanism

Transhumanism

How do you think this verse relates to transhumanism?

فَوَسْوَسَ لَهُمَا الشَّيْطَانُ لِيُبْدِيَ لَهُمَا مَا وُورِيَ عَنْهُمَا مِنْ سَوْءٍ تَهُمَا وَقَالَ مَا نَهَاكُمَا رَبُّكُمَا عَنْ هَذِهِ الشَّجَرَةِ إِلَّا أَنْ تَكُونَا مَلَكَيْنِ أَوْ تَكُونَا مِنَ الْخَالِدِينَ

“Then Satan whispered to them that he might manifest unto them that which was hidden from them of their shame, and he said: Your Lord forbade you from this tree only lest ye should become angels or become of the immortals.”

- (Sūrah al-Aʿrāf 7:20)

How Do You Think This Verse Relates to Transhumanism?



فَوَسْوَسَ لَهُمَا الشَّيْطَانُ لِيُبْدِيَ لَهُمَا مَا وُورِيَ عَنْهُمَا مِنْ سَوْءٍ تَهُمَا وَقَالَ مَا نَهَاكُمَا رَبُّكُمَا عَنْ هَذِهِ الشَّجَرَةِ إِلَّا أَنْ تَكُونَا مَلَكَيْنِ أَوْ تَكُونَا مِنَ الْخَالِدِينَ

“Then Satan whispered to them that he might manifest unto them that which was hidden from them of their shame, and he said: Your Lord forbade you from this tree only lest you should become angels or become of the immortals.”

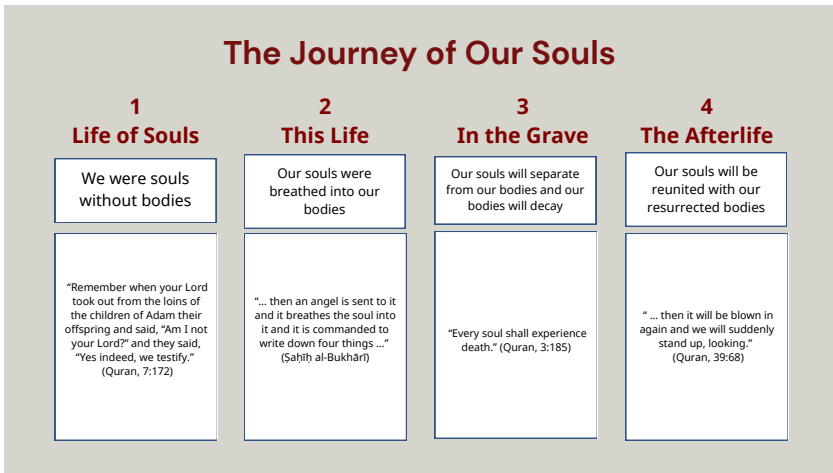
(Sūrah al-Aʿrāf 7:20)

Transhumanism is working toward a post-human that can live forever. The introductory video about transhumanism from Lesson 4.2 mentioned that the goal of transhumanism is to improve humans so that we become “fitter”—in the context of humans being a product of evolution.

The ideology of transhumanism is in the context of a specific view of the human, and the purpose of a human being’s life, as well as an outlook at the future of humans. This is seen in movies and books that have transhumanistic assertions in their stories.

In this verse, Shayṭān tells Adam (pbuh), to do this and you’ll live forever. Humans have a fear or hesitance for death, and, therefore, many humans want to live longer or even forever. However, death is something that is a certainty, as the Qur’an and history tell us. Moreover, it is something that is not inherently negative, it is just a transition point from one phase of life to another.

Slide 4.21: The Journey of Our Souls



Looking at the Journey of Our Souls

As we looked at in Unit 3, we know that our soul goes through various stages, specifically in four general stages:

- 1. Life of Souls: We were souls without bodies.
- 2. This Life: Our souls were breathed into our bodies.
- 3. In the Grave: Our souls will separate from our bodies and our bodies will decay, as our soul moves on.
 - Revelatory Evidence: “Every soul shall taste/experience death.” (Sūrah al-Īmrān, 185). Here it says that every soul shall “experience” death.
- 4. The Afterlife: Our souls will be reunited with our resurrected bodies.



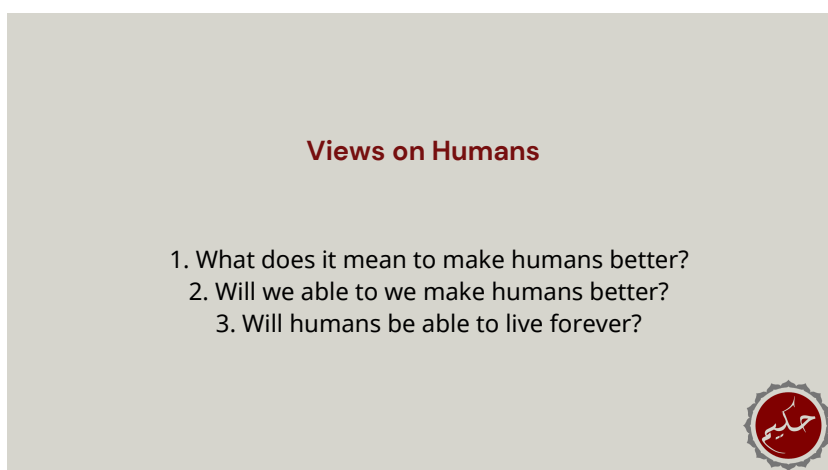
This foundation gives us a framework of human existence, and therefore also puts into perspective the transhumanistic ideas of self-improvement and enhancement.

■ The purpose of a human being comes from an understanding of who we are as humans.

Who we are as humans:

- Not products of an evolutionary process. We are souls that began by Allah's (swt) command and came into existence.
- We were put into a body, on this earth, for a temporary time.
- We will indeed die.
- We will then later be resurrected.

Slide 4.22: Views on Humans



These two views of humans, the transhumanistic view and an Islamic view, bring up certain pertinent questions:

■ Ask students to discuss these questions and come up with their answers and reasoning for each of their answers.

1. What does it mean to make humans better?

The answer to this question will be different based on what you think the purpose of a human being is.

- If you think that a human being's purpose is to maximize personal pleasure and try to live forever, then you will have a particular vision of how to make human beings better.
- If you think that human beings are a body and a soul and that death is a looming reality, and the purpose of this life is to maximize what we do in this life for the sake of, or in preparation for, another life, then you will have a different perspective on how to make human beings better.

- Then also, the use of transhumanism or its goal is changed as well.
- Perhaps it is focused on trying to make the spiritual experience better or making some changes that make obedience to Allah (swt)’s commands easier.

2. Will we be able to make humans better?

- If a human being is just a material body, then the functioning of the human body becomes the most important aspect of the human, and the focus will be to make it functionally better. (Making the body stronger, impervious to disease, and the like.)
 - BUT this view ignores/missing a whole part of the human being which is the consciousness, the soul, and spiritual states.
- If a human being is defined by the body AND a soul, then the focus of improvement will be metaphysical in nature, as well as physical.

3. Will humans be able to live forever?

- Again, this goes back to the fundamental belief of how a human being is defined.
- From an Islamic perspective, this is an easy question, but how exactly is that “forever” life or what does that look like will play a part in how a person enhances themselves.

Slide 4.23: Changing Allah’s Creation

Changing Allah’s Creation

وَأَن يَدْعُونَ إِلَّا الشَّيْطَانَ مَرِيدًا
لَّعَنَهُ اللَّهُ. وَقَالَ لَأَتَّخِذَنَّ مِنْ عِبَادِكَ نَصِيبًا مَّفْرُوضًا لَعَنَهُ اللَّهُ. وَقَالَ لَأَتَّخِذَنَّ مِنْ عِبَادِكَ نَصِيبًا مَّفْرُوضًا
وَلَأُضِلَّهُمْ وَلَأُمَنِّيَنَّهُمْ وَلَأَمُرَّنَّهُمْ فَلْيُبَيِّتْكَ أَأَذَانَ الْأَعْمَى **وَلَأَمُرَّنَّهُمْ فَلْيَغَيِّرُنْ خَلْقَ اللَّهِ** ۚ وَمَنْ يَتَّخِذِ الشَّيْطَانَ وَلِيًّا مِّن دُونِ
اللَّهِ فَقَدْ خَسِرَ خُسْرَانًا مُّبِينًا

“they pray to no one else than Satan, a rebel whom Allah cursed, and he said: Surely I will take of Your servants an appointed portion, and surely I will lead them astray, and surely I will arouse desires in them, and surely I will command them and they will cut the cattle’ ears, **and surely I will command them and they will change Allah’s creation**. Whoever chooses Satan for a patron instead of Allah is verily a loser and his loss is manifest.”

(Sūrah an-Nisā’, 4:117-119)

**A Highly Oversimplified Summary
(Just for the High-Level Idea)**

It is unlawful to beautify a human being by effecting significant permanent change but medical treatment is permissible.



Let us look at a verse of the Qur’an that would help us answer these questions:



On the idea of changing Allah (swt)'s creation, Allah (swt) says in the Qur'an: "they pray to no one else than Satan, a rebel whom Allah cursed, and he said: Surely I will take of Your servants an appointed portion, and surely I will lead them astray, and surely I will arouse desires in them, and surely I will command them and they will cut the ears of cattle, and surely I will command them and they will change Allah's creation. Whoever chooses Satan for a patron instead of Allah is verily a loser and his loss is manifest." (Sūrah an-Nisā' 4:117–119)

Human beings are one of the creations of Allah (swt). So changing human beings would also be an element of what is being warned against in that Satan would inspire humanity to change itself.

This differs from transhumanistic thought because, remember, they believe that humans are part of an evolutionary process, not a formed creation of Allah (swt).

Shayṭān is saying that he will command human beings to change the creation of Allah (swt).

- The context of this verse is referring to the pagans, polytheists of Makkah, who used to do consecrate/make sacred certain animals, and then to show this, they would do things like slit the ears of these animals and do other things that would qualify as "changing the creation of Allah."
- Various *ḥadīth* also testify and apply this concept to human beings changing themselves.
- Because this "changing" is a command or influenced by Shayṭān, the Islamic jurists have stated its impermissibility (again, along with proofs from these ḥadīth).

A highly oversimplified summary of this concept, not to get into the details of what is permissible or impermissible, but for us to exercise that higher-level thinking, is:

- It is unlawful to beautify a human being by effecting significant, permanent change, but medical treatment is permissible.
- For example, cutting your hair to look nice is not considered a significant change, nor a permanent change because your hair grows back.

- Nevertheless, medical treatment is permissible. So if someone broke their leg, because of some accident, and surgery was needed to repair that leg; this would be permissible.
 - For example, cosmetic surgery for mere beautification would be impermissible, yet cosmetic surgery due to disfigurement of the face would be permissible because it would be considered medical treatment.
- This is not a straightforward rule, there are a lot of complexities here that are considered, so this rule is a generalization and an overarching principle, but exceptions to this can be made based on circumstances.
- There are complexities in trying to figure out what treatment is, what a disease is, when it is therapy, and when it is enhancement. These are all questions that the Islamic jurists discuss with doctors in order to come to conclusions about each individual case.
 - But from a higher level, overall perspective, we want to have this viewpoint that this is how Allah (swt) has created us as human beings, and it is impermissible to “change” ourselves in a way that is significant and permanent, with the exception of medical treatment.

Relate this concept back to the three cases seen in Lesson 4.2 of Tommy John Surgery, LASIK eye surgery, and NuClarity. (See Slide 4.17. Therapy versus Enhancement).

- Ask students: Would you change your view now of what you thought about these surgeries before?

Slide 4.24: Allah Created Humans in the Best of Forms

Allah Created Humans in the Best of Forms

لَقَدْ خَلَقْنَا الْإِنْسَانَ فِي أَحْسَنِ تَقْوِيمٍ

“....Surely We created man in the best form.”
(Sūrah at-Tīn 95:4)

Humans have been created with the best potential to freely choose to worship Allah.





We have established that Allah (swt) has created us, and now we see that He has created us in the best of forms.

Allah (swt) says:

لَقَدْ خَلَقْنَا الْإِنْسَانَ فِي أَحْسَنِ تَقْوِيمٍ

“Surely We created man in the best form.”

(Sūrah at-Tīn 95:4)

The concept that Allah (swt) has created us in the best way for our optimal or proper function.

- For example, the purpose of the ear is to hear, the purpose of the eye is to see, so the anatomy follows the physiology of the body part. Although the ear’s function is to hear, sometimes Allah (swt) creates people who are deaf, with His infinite wisdom.
- But what about the entire/whole/complete human being? What is the purpose of a human being itself? The purpose of the human being is to know Allah (swt), to worship Him, and to love Him.
- So the “best” form of the human being is not the strongest, fastest, insusceptible to disease, lives forever, and so on. It is the form that best fulfills this purpose of knowing and worshiping Allah (swt). This is in reference to not just the bodily form, but the best spiritual form as well (the *fiṭra* = the form of the soul). The spiritual form can change when we purify it (be grateful, humble, and the like), and can be distorted when we allow exposure to sin, for example, shirk, lying, and showing off. Therefore, humans have been created with the best potential to freely choose to worship Allah (swt) (but that potential is not always realized).
- ثُمَّ رَدَدْنَاهُ أَسْفَلَ سَافِلِينَ “But We will reduce them to the lowest of the low” (Sūrah at-Tīn 95:5) is what happens when this potential of our human existence is not fulfilled or realized.
- This also aligns with the concept in Islam that all the Sharī’a rules we have are for our benefit; that Allah (swt) wants us to benefit and therefore these things are put in place to benefit us. Consequently, doing these things that we are being told to refrain from will cause us harm. So, changing the human being in a significant and permanent way is forbidden, and will harm us.



Slide 4.25: No Immortality in This Life

No Immortality in This Life

كُلُّ نَفْسٍ ذَائِقَةُ الْمَوْتِ

"Every soul will, without doubt, fully experience death."

(Sūrah al-Anbiyā' 21:35)

Death gives our lives purpose.



"Every soul will, without doubt, fully experience death."

(Sūrah al-Anbiyā' 21:35)



It is part of our īmān to believe in death; death is a reality of life. Every single human being will die. And death is defined as the removal or separation of the soul from the body; a transfer of our soul from one realm of existence into another realm of existence.

Death gives our lives purpose; it makes our lives meaningful. There is a time limit to life and consequences for our actions in the hereafter.

- If a person lives a life of pain and suffering, and they are patient and believes in a life after death, in which they will be rewarded for their suffering and patience, then this life and the difficulties that they are experiencing become eternal bliss in the next life; therefore this suffering becomes meaningful and purposeful.
- If a person dies and that's it, there is no afterlife, and they suffer calamities in life, then human existence becomes depressing and lacks purpose.

Slide 4.26: But There is Immortality in Another Life

But There is Immortality in Another Life

جَزَاؤُهُمْ عِنْدَ رَبِّهِمْ جَنَّاتٌ عَدْنٌ تَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ خَالِدِينَ فِيهَا أَبَدًا رَضِيَ اللَّهُ عَنْهُمْ وَرَضُوا عَنْهُ ذَلِكَ لِمَنْ خَشِيَ رَبَّهُ

“Their reward is with their Lord: Gardens of Eden underneath which rivers flow, wherein they dwell forever. Allah is pleased with them and they are pleased with Him.”
(Sūrah al-Bayyinah 98:8)



But there is immortality in the next life.

The belief in something coming after death gives life purpose. And not just life, but an eternal life, an immortal life.



جَزَاؤُهُمْ عِنْدَ رَبِّهِمْ جَنَّاتٌ عَدْنٌ تَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ خَالِدِينَ فِيهَا أَبَدًا رَضِيَ اللَّهُ عَنْهُمْ وَرَضُوا عَنْهُ ذَلِكَ لِمَنْ خَشِيَ رَبَّهُ

“Their reward is with their Lord: Gardens of Eden underneath which rivers flow, wherein they dwell forever. Allah is pleased with them and they are pleased with Him.”

(Sūrah al-Bayyinah 98:8)

Immortality is in the next life, not here. If we ignore this and expand life here on earth, there is only so far that we can go.

Slide 4.27: Recasting Stories to Make Them More Islamic

Group Activity

- Identify transhumanist elements in these three video clips
- Recast the stories to make them more Islamic

1. “Fennec’s Cybernetic Implants,”



2. Scene From Avatar Number 2,



3. Avatar






Cybernetic
Implants



Avatar #2



Avatar Link
(Next Scene)



Group Activity

Divide the students into groups and assign a video clip to them.

Ask students to Identify transhumanist elements in the following video clips:

1. The Book of Boba Fett: two moral agents here, the patient and the doctor. Mandalorian: **"Fennec's Cybernetic Implants,"** a clip from Star Wars: The Book of Boba Fett, Chapter 4, Series 1, Episode 4.

2. Avatar (the first one): - Jake Sully, the main character, is about to enter the pod. **"Scene From Avatar Number 2."**

3. Avatar (to be shown in connection with previous scene): And now he has been uploaded into his new body.

- Rewrite the stories to make them more Islamic/ align with Islamic theology (rewrite any unIslamic notions to make them follow the guidelines presented). (Give the students about 15-20 minutes to do the rewrites.)

Note: This activity can be done as a homework assignment or a class activity.

- Have each group present their identification of the transhumanist elements and their Islamic rewrites
- The class will vote on the best stories after all the groups have shared their rewritten stories.

Slide 4.28: Discussions and Reflections

Discussions and Reflections

Group Activity

Now let's VOTE:

Which group rewrote the BEST Islamic story?



Transhumanist elements present in each clip:

As a guide for teachers, these are the transhumanist elements that students can point out:

- The Book of Boba Fett: Note Boba uses the word “modification,” which is a neutral term related to enhancement. Then he says: “This woman is dying,” and he brings her to the shop to regain life [the idea of immortality in transhumanism]. The “doctor” has cybernetic implants so he can perform body modifications better. The idea of doctors being technicians and serving the customer (seen by him seeing the money bag and saying: “You should have said that first”).
- Avatar: Note the language when the protagonist who cannot use his legs says something to the effect “I have lived my life not dealing with what doctors say I cannot do,” which again represents moving beyond medicine. The entire video clip demonstrates mind uploading. Note the language that the technician uses, such as that is a “gorgeous brain” speaking of the protagonist’s brain as it is “phasing” with the Avatar. Then it moves beyond the brain substrate as the mind is uploading to a new body and the staff says: “Welcome to your new body.”

Islamic Rewrites:

As a guide for teachers as to what Islamic elements to incorporate into the rewritten versions of these video clips:

- Examine the intentions with which the actions are being done; include intent for the *ākhirah* (the hereafter).
- Add virtue to actions so that it is not just a physical action but one that transcends the physical and has metaphysical elements, such as reward for good deeds and sin for forbidden actions, virtue in struggling and overcoming the difficulty, perseverance, and patience.

Slide 4.29: Deep Reflections

Deep Reflections

Group Activity

- Identify transhumanist elements in these three video clips
- Recast the stories to make them more Islamic
- We will vote on the best stories after we share with the group



Deeper Reflection and Changing the Underlying Narrative

In the past, storylines usually included someone who struggled with something in life (growing up as an orphan, having an ill family member who needed specialized care and the effect of that on the people around him/her, or a close family member dying of an incurable disease) and how they overcame that difficulty and became incredibly good/moral people. The audience is, in turn, moved by this human experience.

In all of these storylines, we see an underlying theme, that whenever something bad/harmful happens to a human being, they do not have to worry, they can just get some modifications made to their body (turned into a robot, or mechanical body parts) so that they can be fixed up in a way that will make them live forever. This is transhumanist ideology at its core. Where is the struggle? Where is the human experience of overcoming difficulties? When this transhumanist ideology is put into people's minds, when real difficulty comes that cannot be "fixed" in real life, they do not know how to deal with that, grow with that, and become a better person as a result of that.

So, this underlying aspect, a deeper narrative of acceptance, gratitude and doing something great with what a person is given would have made these clips more Islamic. There should be a reflection of what is the purpose of our human existence, what a human being actually is, and portraying our Islamic values which needs to be brought into the rewriting/analysis of these clips.