

Table 15c Human Development Paradigm (Nussbaum)

Human Development Paradigm		
Item	Factor 1	Factor 2
1.	Life – Ability to live to the end of a life of normal human length without it being cut short.	
2.	Bodily health – Ability to live in good health, with access to adequate nutrition and shelter.	
3.	Bodily integrity – Ability to move freely, be free from assault, and have sexual satisfaction and reproductive choice.	
4.	Senses, imagination, and thought – Ability to use senses to imagine, think, and reason, informed by an adequate education, to produce and experience works, events, political and artistic speech, and religious exercise, of one's own choice; and the ability to have pleasurable experiences and avoid pain	
5.	Emotions – Ability to experience and explore positive and justified negative emotions and feelings towards others.	
6.	Practical reason – Ability to develop and engage in reflection as to what is “good”, and use the resulting personal axiologies to engage in goal-driven self-reflection.	
7.	Affiliation – Ability both to (a) live, engage socially, and empathize with others; and (b) be treated with dignity and respect, and avoid discrimination.	
8.	Other Species – Ability to live with and experience concern for other species (e.g. plants and animals) and the natural world in general.	
9.	Play – Ability to laugh and play.	
10.	Control over one's political and material environment – Ability to participate effectively in political processes affecting one's life, hold	

Human Development Paradigm		
Item	Factor 1	Factor 2

property, seek employment and work in a human-like, goal-driven, and social way.

Zhu, Y., Wen, R., & Williams, T. (2024). Robots for Social Justice (R4SJ): Toward a More Equitable Practice of Human-Robot Interaction. 2024 19th ACM/IEEE International Conference on Human-Robot Interaction (HRI), 850–859. <https://doi.org/10.1145/3610977.3634944>

Grounded in the Engineering for Social Justice (E4SJ) framework for Engineering Education

Nussbaum introduced a human development paradigm, which applies the capabilities approach, and generated a list of central human capabilities from the following ten aspects

Nussbaum, M. C. (2009). Creating capabilities: The human development approach and its implementation. *Hypatia*, 24(3), 211-215.
https://apps.ufs.ac.za/media/dl/userfiles/documents/news/2012_12/2012_12_10_martha_nussbaum_ufs_december_2012.pdf