Visibility of Women in Science, for an Anti-oppressive World

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Visibility for?

History of women in science
Overview

- History of Women in Science and Epistemic Injustice
- Anti-oppressive Education
- Critical and Transgressive NOS Approach
- The Silva-Sepúlveda approach
1. History of Women in Science and Epistemic Injustice
Key Concepts
Key Concepts
Women in Science

Hierarchical Segregation

Territorial Segregation

The Matilda Effect
Epistemic Injustice (Fricker, 2007)
Unfortunately, Maurice could not see any decent way to give Rosy the boot. To start with, she had been given to think that she had a position for several years. Also, there was no denying she had a good brain. If she could only keep her emotions under control, there would be a good chance that she could really help him.

(James Watson, 1976, p. 29)
I think for every woman physicist [...] it’s very hard to say, “Yes, I’m really better than.” Sometimes it’s really impossible to say, “I’m considerably better than the person who got this job.”, you’re doubtful about all the factors involved, and it’s not only I who face this problem it’s also faced by other women physicists [I] know, but you’re right. I’ve never felt intellectual discrimination, I’ve felt some economic discrimination.

(Melba Phillips, AIP Interview, 1977)
One hermeneutical rebellion inspires another.

(Fricker, 2007, p. 167)
How could the history of women in science and epistemic injustice contribute then to an anti-oppressive world?
Critical Education

Women in Science and Epistemic Injustice

Freirean Pedagogy

Critical and Transgressive NOS Approach
2. Freirean Pedagogy

Towards an anti-oppressive education
to perceive social, political and economical contradictions, and to take action against the oppressive elements of reality

(Freire, 1995, p. 17)
Students:
- Action and change
- Resisting and challenging oppression
Critical Pedagogy

- Liberating education aims to prepare individuals for democracy

Students:
- Subjects of their own history
- Involve in political and cultural struggles in search of their emancipation
- Critical awareness of the world, together with the teacher, through dialogue
Educators:

- Teach about the dynamics of oppression
- Dialogical action
- Change society
Women in Science

together with

Epistemic Injustice

to create

Limit-situations

“revealing [individuals] their true nature as concrete historical dimensions of a given reality”
3. The Silva-Sepúlveda approach

*Education is political; teaching is a transgressive act.*
Nature of Science (NOS)

NOS approach:

- What science is
- How scientific knowledges are developed
- Science interacts with society, culture, and human complexity

(Hansson and Yacoubian, 2020)
Scientists:
the processes of oppression, the maintenance/rupture of exploitation, violence against human groups,
the structural identity prejudice, and credibility deficit
marginalization based on gender, race, sexuality, class and so on
The Silva-Sepúlveda approach

- History of Women in Sciences
  - Epistemological Dimension
  - Socio-political Dimension
  - Freirean Pedagogy Dimension

- An Anti-oppressive Education
  - About sciences
  - Epistemic Injustice
  - Feminists critiques of science
  - Hierarchical and Territorial Segregation
  - Intersectionality
  - The Matilda Effect
  - Oppression Dynamics
  - Dialogical actions

- Epidemic

- Intersectionality

- Epistemic Injustice

- Oppression Dynamics

- Dialogical actions
But how?

Define a historical episode:
- Woman, field and/or concepts, models
- Power relations
- Intersectionality

Define a critical NOS approach:
- Socio-political questions
4. Not an end, but a beginning...

How could our histories of women in science be written to promote social justice?
The classroom remains the most radical space of possibility in the academy.

(bell hooks, 1994, p. 12)
Thank you!

I’ll be glad to hear from you: isilva@uefs.br