



Hands-on in Including Gender in Agrifood Systems Teaching

Date

Facilitator's name and email address

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Agenda

Time	Program
9.30 – 9.55	Introduction and expectations
9.55 – 10.30	Agrifood systems context – facts and figures
10.30 – 11.30	Gender in teaching – fundamentals (1)
11.30 – 11.45	Break
11.45 – 12.20	Gender in teaching – fundamentals (2)
12.20 – 13.05	Agrifood systems examples
13.05 – 13.15	Towards the institutional transformation
13.15 – 13.30	Key lessons from the day and evaluation



Glossary

Gender Balance: An equitable distribution of genders within a group, organization, or team, often with the goal of fostering diverse perspectives and reducing bias.

Gender Barriers: Obstacles that limit opportunities, resources, or fair treatment based on gender, often rooted in societal norms or institutional practices.

Gender-Based Violence: Any act of violence directed at an individual based on their gender, often intended to establish or reinforce gender-based power inequalities.

Gender Dimension: The integration of gender considerations into the design, implementation, and evaluation of policies, projects, or research to ensure that they benefit all genders fairly.

Gender Equality: The state of equal access to opportunities and resources, regardless of gender, aiming to eliminate gender-based discrimination and ensure fair treatment for all.

Gender Equality Plan: A formal policy or document developed by an organization to promote equal opportunities and eliminate gender bias within the workplace or project environment.

Gender Impact: The specific effects or outcomes that an action, policy, or program has on gender equality or the experiences of different genders.

Gender Inequalities: Disparities in status, resources, opportunities, and treatment based on gender, often resulting from systemic biases or discrimination.

Glossary

Gender Mainstreaming: A strategy in which gender perspectives are integrated into all stages of project planning, implementation, and evaluation, promoting equal opportunities and preventing gender-based discrimination.

Gender Quotas: A system of setting minimum requirements for gender representation in certain areas, such as employment or decision-making bodies, to promote gender equality.

Gendered Metaphors: Figurative language that reinforces gender stereotypes or assigns gendered characteristics to certain roles, objects, or actions.

Gender-Sensitive Lens: An approach or perspective that actively considers and addresses the different needs, roles, and experiences of individuals based on their gender.

Language Bias: The use of language that reinforces stereotypes or excludes certain groups, often unintentionally; this can include gendered terms or phrasing that favor one gender over another.

Mitigating Measures: Actions taken to reduce or counteract potential negative effects, such as policies or practices aimed at lessening gender-based barriers or biases.

Sexual Harassment: Unwanted or inappropriate behavior of a sexual nature that creates an intimidating, hostile, or offensive environment for the victim.

Unconscious Gender Biases: Implicit biases specifically related to gender, which can influence perceptions, decisions, and behaviors without conscious awareness, often perpetuating stereotypes and inequalities.

Contents

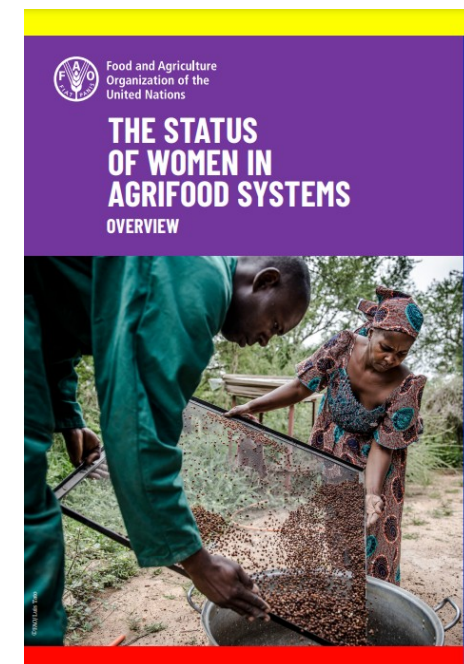
1. Agrifood systems context
2. Gender in teaching
3. Agrifood systems examples
4. Towards the institutional transformation
5. Recommended readings
6. Final remarks



Agrifood systems world context

2023

Agrifood systems are a major employer of both women and men. Globally, **36 percent** of working women are employed in agrifood systems, along with **38 percent** of working men.

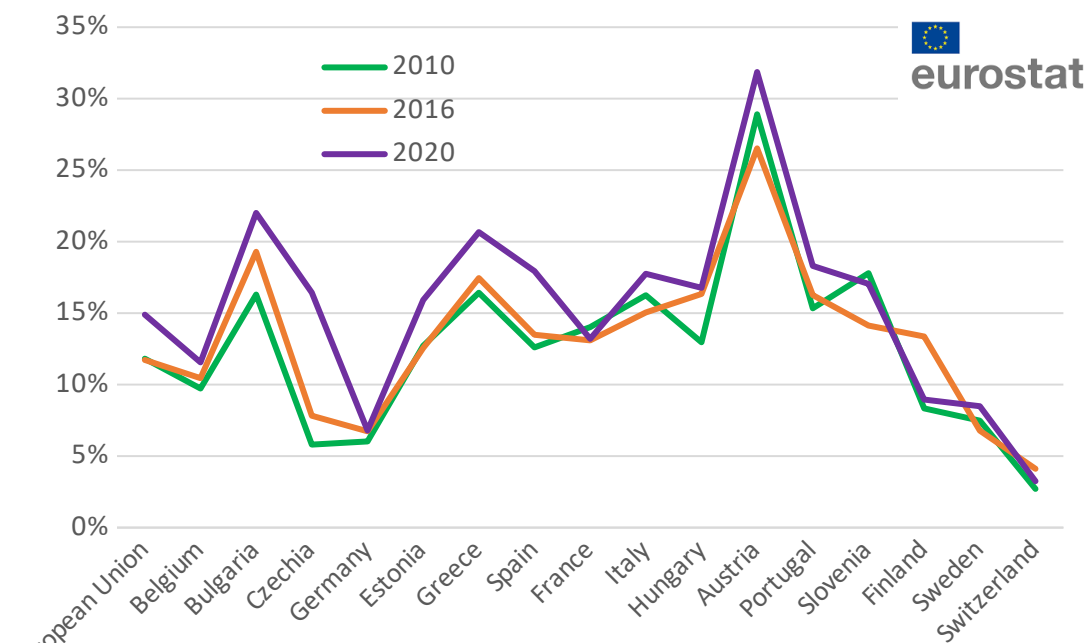


Men have greater ownership or secure tenure rights over agricultural land than do women in **40 of 46 countries** reporting on Sustainable Development Goal Indicator 5.a.1.

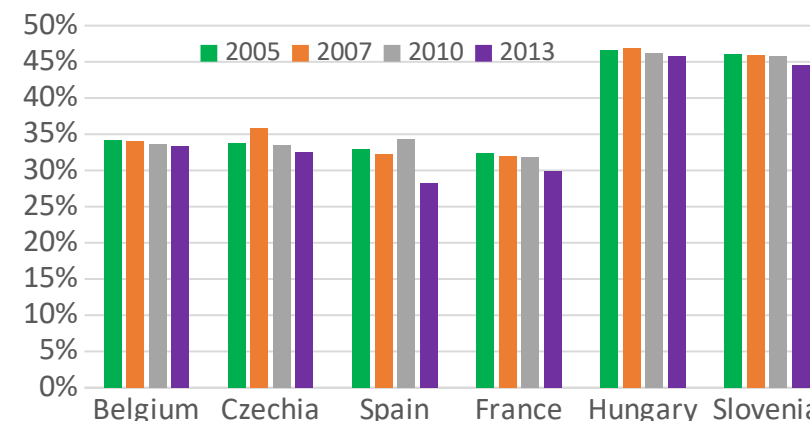
Women engaged in wage employment in agriculture earn **82 cents** for every dollar that men earn.

Agrifood systems - EU context

% of economic value (€) corresponding to female farm managers



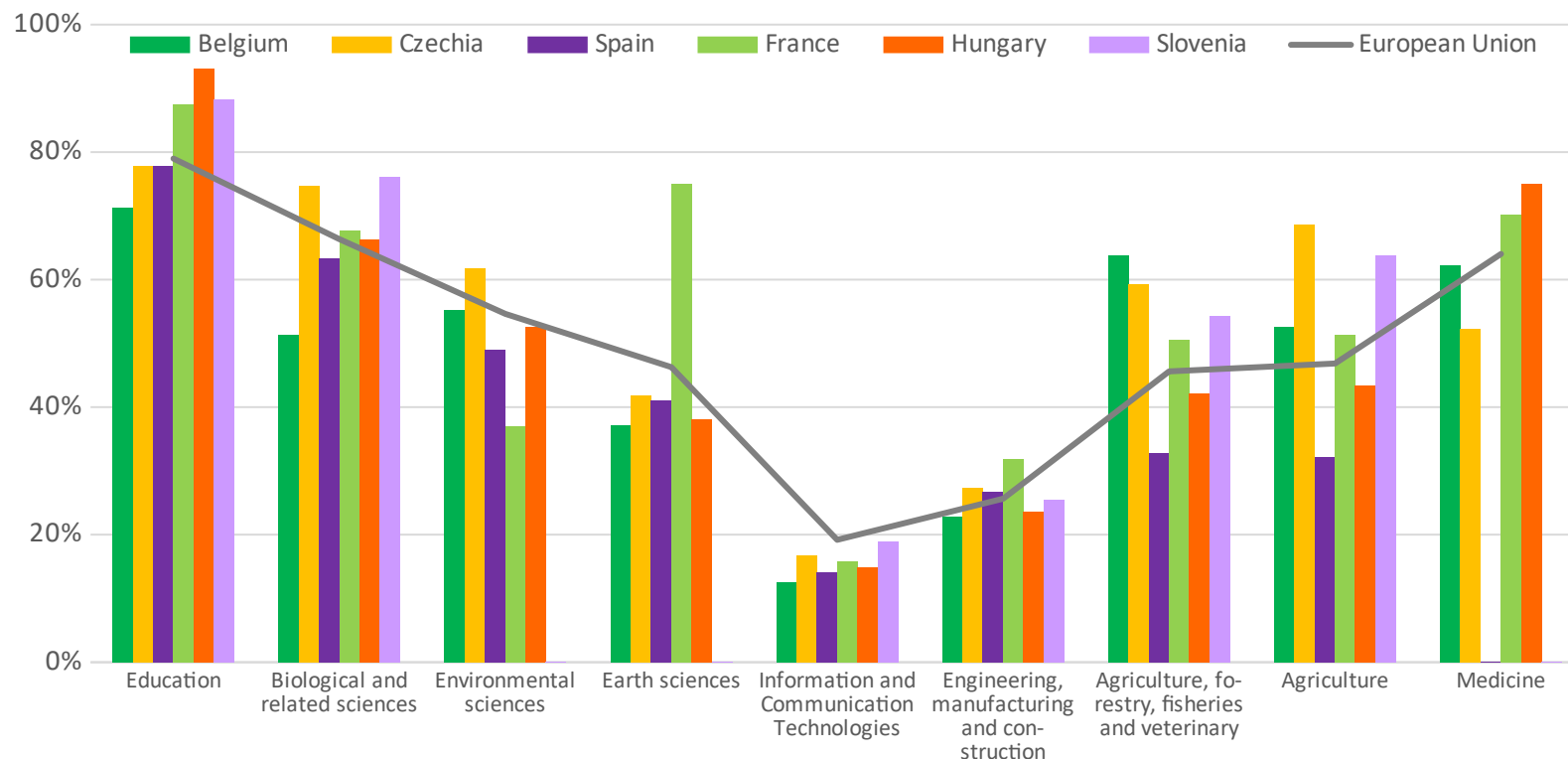
Female % of regular labor force



The value (€) considers the general characteristics of farms, information on their land, livestock and labor force, production methods, rural development measures and agro-environmental aspects that look at the impact of agriculture on the environment.

Agrifood systems - EU

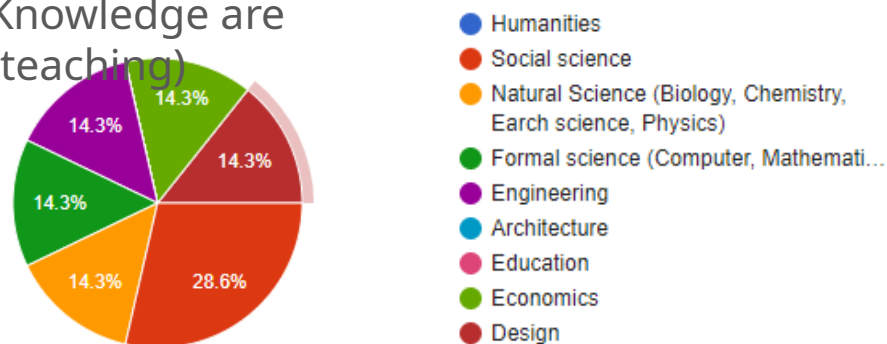
% of Bachelor female students (2021) **context**



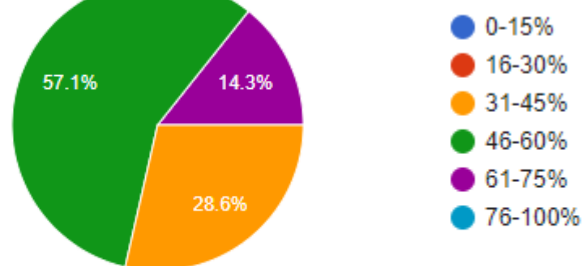
AGRIGEP context

7 answers

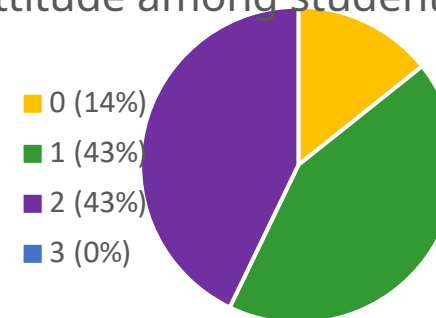
Knowledge are
(teaching)



% female students



Different attitude among students based on gender



- women are more diligent
- lower self-confidence of women, distribution of tasks (women-administration, organisation)
- different attitudes to learning, different attendance and communication styles
- male students tend to participate more in class (asking questions and replying to questions)

Activity 1: stereotypes

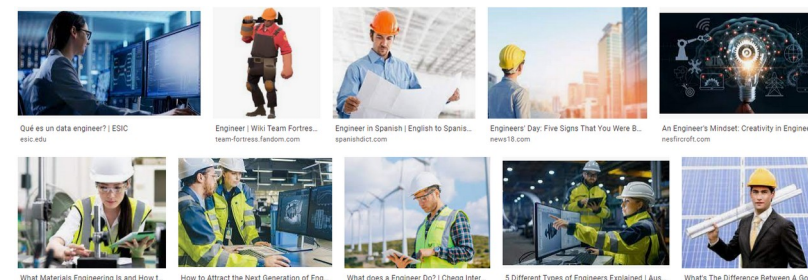
**What are the stereotypes that society
has regarding a person who works in
engineering?**

... and in agrifood systems engineering?

Stereotypes

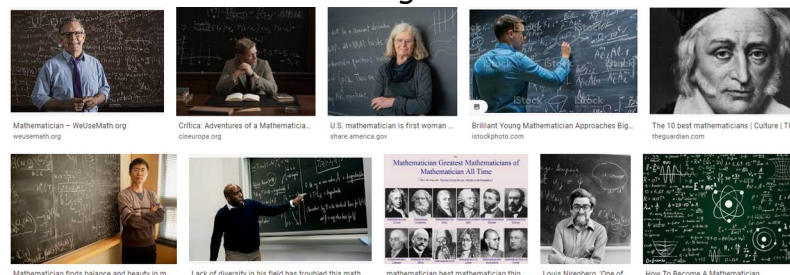
Engineering: ☐ Object-oriented, individual work, ...

Google search: engineer



Mathematician ☐ Traditionally:

Google search: mathematician

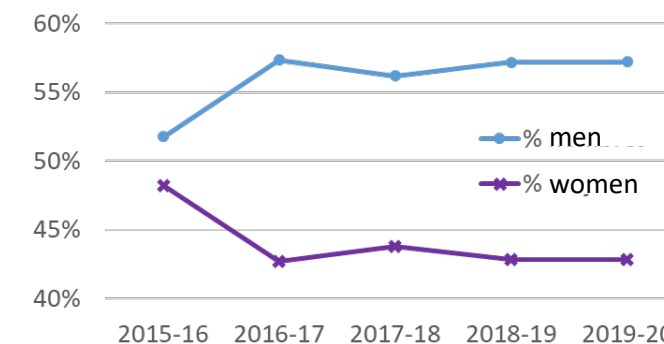


☐ Recently:

Google search: big data specialist



Percentage of students in Maths Bachelor (Spain) by sex



Stereotypes

Agrifood engineering:

❑ Rural context, manual labor, ...

Google search: agrifood engineer person



EIT Food
agrifood entrepreneur - EIT Food



Department of Engineering, University of Cambri...
Agri-Food Robotics | Department ...



LinkedIn
Agri-Food Pact for Skills partnership ...



First Work
Agri-Food Pathways - First Work



Limagrain
Agri-food research and development ...



WUR
Artificial Intelligence in Agrifood ...



Merkur
Specialized Agri-food Industry Talent ...



Texas A&M Engineering - Texas A&M Uni...
Agriculture and Food Careers | Texas ...



Wikipedia
Agricultural engineering...



Deko Group
Agricultural & Agrif...



Tech Transfer Agrif...
Who we are - Tech...

Determinants

- ❑ Gender-biased stereotypes and roles (family and society in general)
- ❑ Lack of female role models → invisibility of women, Matilda effect, glass ceiling
- ❑ Fears and insecurities → impostor syndrome



But...

What concept does society have of success and excellence?

Contents

1. Agrifood systems context
- 2. Gender in teaching**
3. Agrifood systems examples
4. Towards the institutional transformation
5. Recommended readings
6. Final remarks



Gender mainstreaming



The governance bodies, key actors and decision-makers



Recruitment, career progression and retention



Work and personal life integration

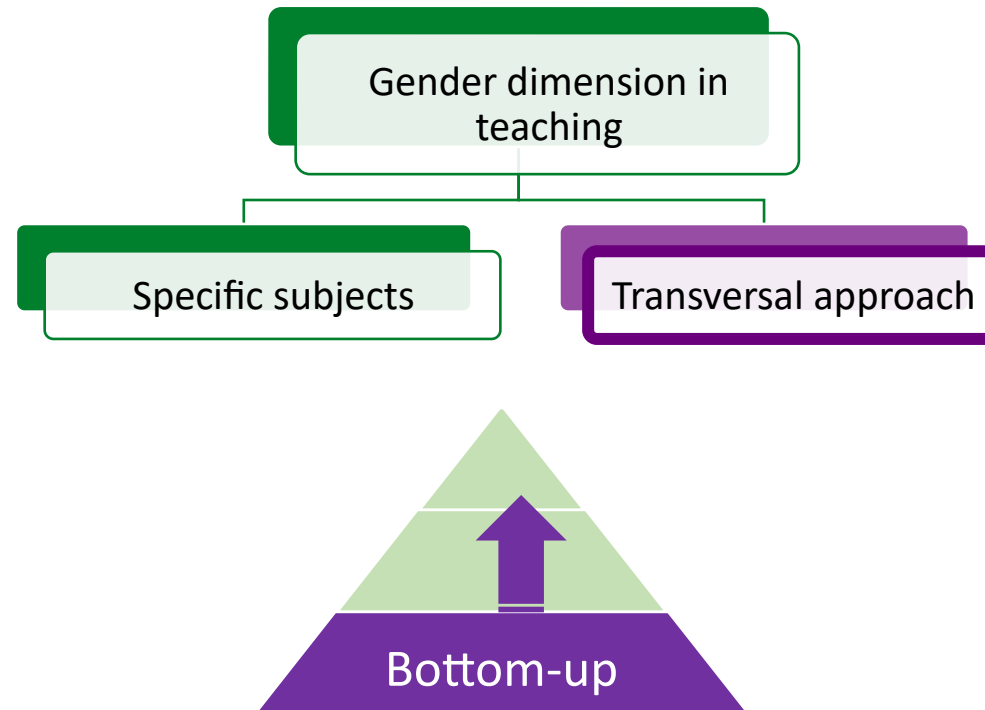


Researchers and research: gender equality and sex and gender perspective

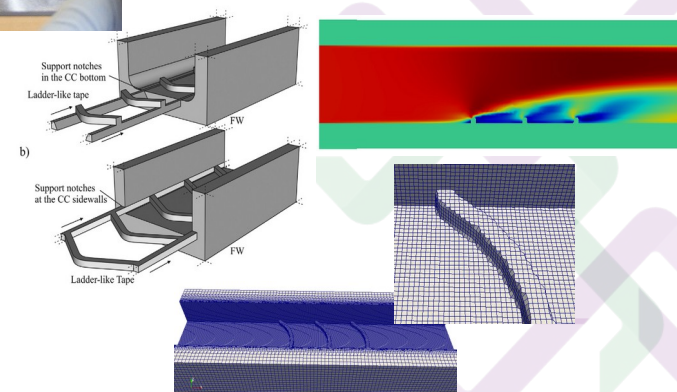
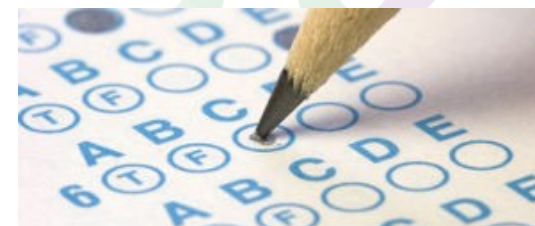


Integration of sex and gender dimension in teaching curricula

Basic principles



Gender-neutral or gender-blinded?



Gender blindness and its implications

Gender-neutral.... or gender-blind?

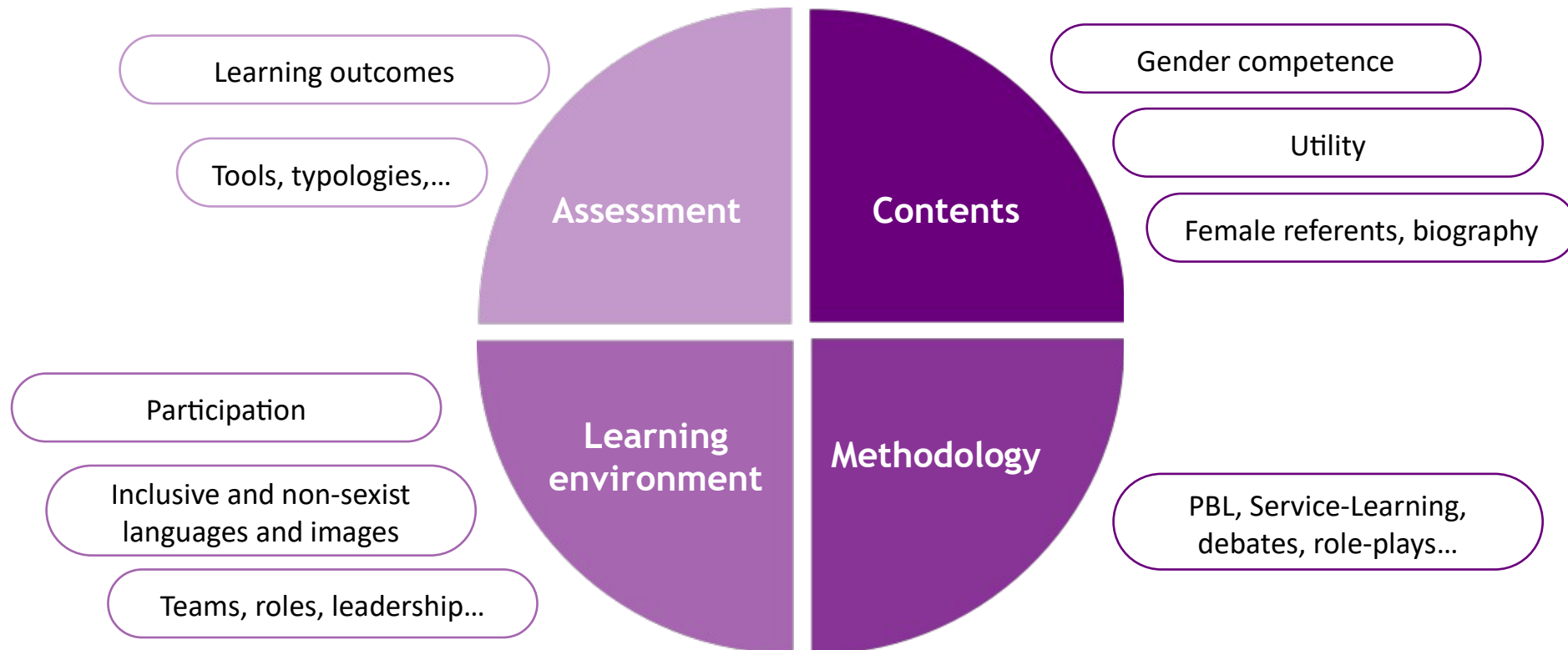
Masculinization of the professional and academic culture of the discipline



Impact:

- ☐ Low proportion of female students in engineering
- ☐ Perpetuation of stereotypes
- ☐ Under-representation of women in engineering decision-making bodies
- ☐ Gender-blind research for the society

Basic principles



Methodology

- ❑ Active methodologies (as promoters for human dimension)
 - ✓ Lower competitiveness and more collaboration
 - ✓ Building healthy self-confidence
 - ✓ Reduction of stereotypes
- ❑ Self-efficiency → referent female engineers

Learning environment

- ☐ Female students participation
- ☐ Gender-sensitive language

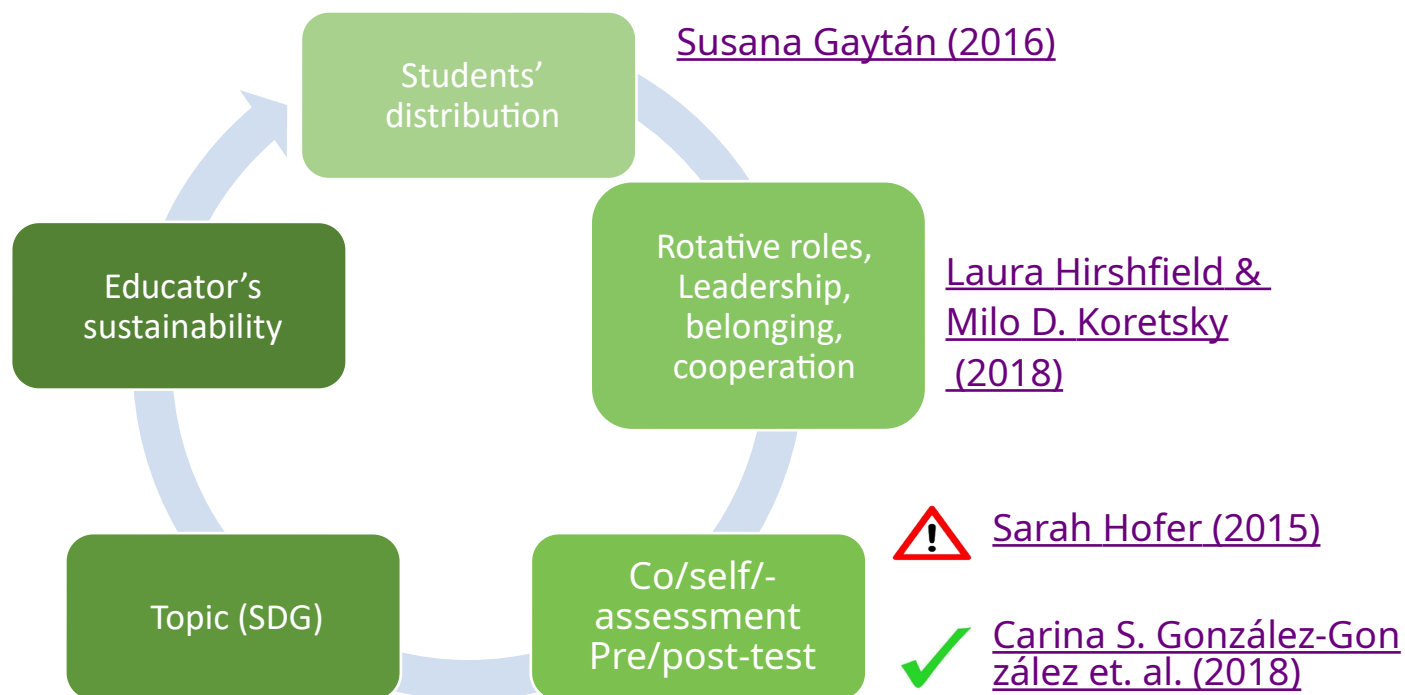
Universitat Politècnica de Catalunya: Third person pronouns

(he/she, him/her → plural they, their, ...)

- ☐ Egalitarian visual resources
- ☐ Teamwork gender distribution and roles

Learning environment

Project Based Learning (PBL) & teamwork



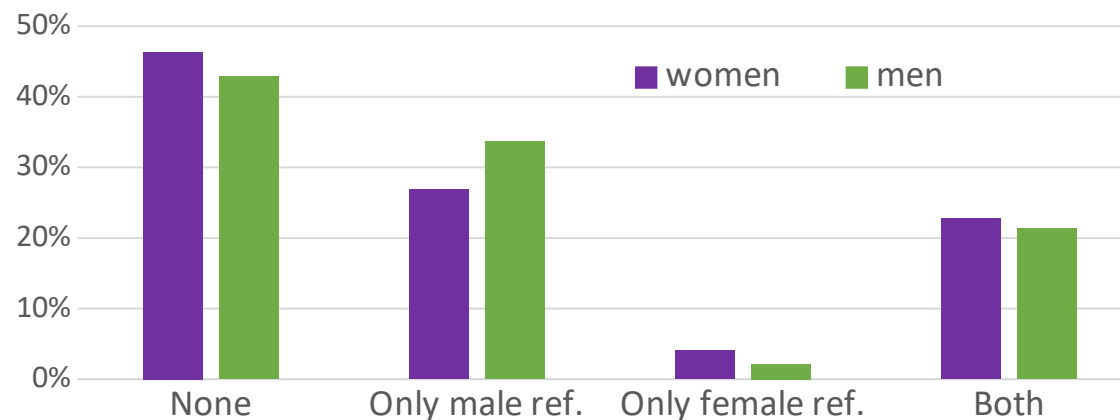
Contents

Survey 2019

548 students

16 courses

7 Bachelor and Master
degrees



→ male/female referents

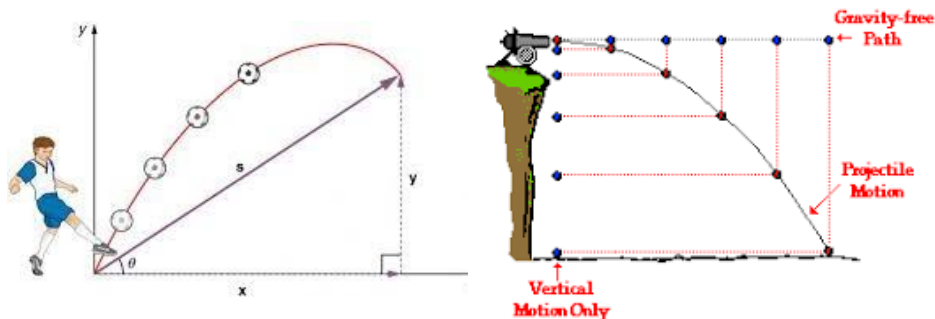
	Male students	Female students
Male referents	Actual and from the field of study	Belonging from the personal circle
Female referents	Belonging from the personal circle or UPC teaching staff	

Contents

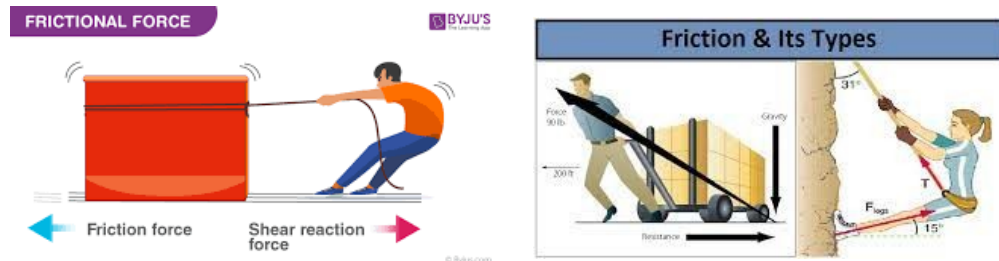
Fundamentals

- Examples: calculus, algebra, physics, statistics...
- Focus: contextualization

Google “Parabolic movement”:



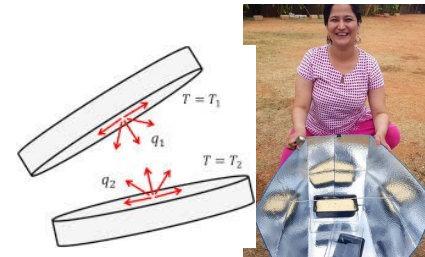
Google “Friction force”:



Contents

Technologies

- Examples: heat transfer, electrotechnics, ...
- Focus: + safety, environment, ergonomic, SDG, consumption paths, ...



Service-learning:
Building improvement:
energy, accessibility,
acoustics, ventilation, ...

- Address the realities of both women and men
- Sex and/or gender variables as study variables
- In surveys and data collection disaggregate by sex (& gender) & analyze possible differences and actions to take
- Representativeness of the sample group
- Inclusive and non-sexist language (and images)

Contents

Management

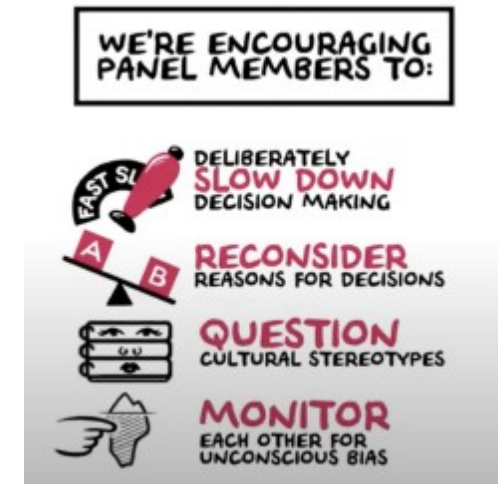
- Examples: projects, organization, human resources, ...
- Focus: + + gender in interpersonal relationships, recruitment, work-life balance, ...

Discussions regarding gender gaps and biases in the selection processes and promotion



In projects or case studies, team analysis:

- Gender parity in teams, work-life balance, and career progression
- Transparent and bias-free hiring
- Monitoring



Contents

Fundamentals

- Examples: calculus, algebra, physics, statistics...
- Focus: contextualization

Technologies

- Examples: heat transfer, electrotechnics, ...
- Focus: + safety, environment, ergonomic, SDG, consumption paths, ...

Management

- Examples: projects, organization, human resources, ...
- Focus: + + gender in interpersonal relationships, recruitment, work-life balance, ...

Assessment

Is it relevant? Then, it must be assessed

- ❑ Tools:
 - Open question or multiple-choice test?
 - Contextualised questions
- ❑ Types:
 - formative, feedback
 - Pros & cons of co/self-assessment
- ❑ Student involvement: *when, how, why*
- ❑ Unconscious bias by the educator!

Activity 2: checklist



Item – Classroom management
Be careful with your own response to the students' contributions. Show tolerance and minimize biases and stereotypes.
Use of inclusive and non-sexist language in the classroom
Use of inclusive and non-sexist language in the material
Use of images that do not perpetuate gender stereotypes
Analysis of possible gender imbalances in classroom participation
Dedication of the time necessary to resolve doubts outside the classroom
Promotion of female participation in the classroom
Protection of participation in the classroom against incursions by third parties
Promotion of the use of inclusive and non-sexist language among students
Explanation in the classroom of gender distribution in teams
Explanation in the classroom of gender bias in the distribution of roles in teamwork
In mixed teams, promote the empowerment of students with lower self-esteem
Promoting rotating roles in teamwork
AVERAGE RATING

Item – Methodology
Active learning: combination of participation with projects, case studies, practices, etc.
In the projects, study topic to be chosen
Definition of projects that have a certain social and/or gender relevance
Explanation of the social and/or gender relevance of projects, case studies, etc.
Case study showing the contributions of women and men
Conference or video of a reference work (showing the relevance of the activity)
Organization of a debate on aspects of gender inequalities

Item – Contents	Design
Evidence of the usefulness of the subject	
Evidence of the social relevance of the subject (SDG)	
Evidence of the gender relevance	
Design of exercises and examples that do not perpetuate gender stereotypes	
Introduction of statements with social and/or gender relevance	
Incorporation of sex and gender variables in the analyses	
Incorporation of a transversal gender competence	
Presentation of leading women and their contribution	
Introduction of the full first name in bibliographic references	
Preparation of flexible content according to the preferences and needs of the students	
AVERAGE RATING (0-5)	

Item – Assessment	Design
Transparency in the evaluation criteria and their prior notification	
Providing guidelines and, if possible, personalized suggestions for the preparation of oral defenses	
Use of multiple and diverse evaluation instruments	
Combination of various question formats in written exams	
Definition of contextualized exam statements, explaining social and/or gender relevance	
Use of a formative evaluation (personalized <i>feedback</i>), even in the final exam	
At least one learning outcome related gender	
Pre and ex-post surveys with indicators by sex to evaluate improvements in the	
Pre and ex-post results	
Activity related to the gender perspective	
Results obtained in the qualification of the	
Strategies by sex in order to detect possible	
Our teaching	
Flexible evaluation system that the student	
AVERAGE RATING (0-5)	

Activity 2: checklist

Time	Program
10 min.	Individually, fill-out the checklist
5 min.	Write your grades in the summary table in MIRO

ACTIVITY 2: checklist
Identification of good practices

INSTRUCTIONS - PART 2A - INDIVIDUAL WORK - 15'

1. Self-assess the degree of GD in your teaching. Focus on a given subject. Use your own checklist.
2. Calculate the average grade for each of the four tables within the checklist (each one corresponding to one of the 4 pillars of the teaching).
3. Write the final grade of each pillar in the summary table, together with your name and the name of the subject you have been focused on.

INSTRUCTIONS - PART 2B - TEAMWORK - 25'

1. Identify high grades in each pillar within your team members. Which good practices are they indicating in their teaching?
2. Write these good practices into your 4 pillars-sheet by using the sticky notes.
3. Summarize the main findings in the plenary session.

Subject: Education

Area	Subject	Grade	Comments
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

TEAM A

TEAM B

TEAM C

Identification of good practices

1. Self-assess the degree of GD in your teaching. Focus on a given subject. Use your own checklist.
2. Calculate the average grade for each of the four tables within the checklist (each one corresponding to one of the 4 pillars of the teaching).
3. Write the final grade of each pillar in the summary table, together with your name and the name of the subject you have been focused on.

1. Identify high grades in each pillar within your team members. Which good practices are they including in their teaching?
2. Write these good practices into your 4 pillars-sheet by using the sticky notes.
3. Summarise the main findings in the plenary session.

[illegible][illegible]

TEAM B

10:00

SWOT

Strengths (Internal)

- Strong brand identity
- Established customer base
- High-quality products
- Experienced management team

Weaknesses (Internal)

- Limited marketing budget
- High production costs
- Dependence on a few key suppliers
- Limited geographic reach

Opportunities (External)

- Growing market demand
- Emerging markets
- New product lines
- Strategic partnerships

Threats (External)

- Intense competition
- Fluctuating raw material prices
- Changing consumer preferences
- Economic downturns

TEAM A

The diagram is a circle divided into four quadrants, each with a label and a corresponding business strategy:

- top-down**: strategy of top-down
- bottom-up**: strategy of bottom-up
- middle-out**: strategy of middle-out
- middle-in**: strategy of middle-in

Arrows indicate a clockwise flow from top-down to bottom-up, then to middle-out, then to middle-in, and finally back to top-down.

[illegible]

Time	Program
15 min.	Teamwork
10 min.	Sharing & wrap-up

The syllabus

URGENT:

To make explicit the social and human dimension of ~~(most of)~~ the engineering subjects.



Syllabus

- Goals
- Contents
- Methodology
- Assessment
- References

Educators' resistances

ID	DESCRIPTION	ACTION
1	Resentment against men (due to personal experiences or to cultural heritage). It appears at the very beginning of the training.	Ask participants to maintain their focus on identifying and implementing changes within their own lessons and teaching activities. If done properly, no extra incidents appear.
2	Gender-blinded (unexperienced) participants	Promote discussion on statistical data and examples to raise awareness (Carreiro-Otero et al., 2021).
3	Lack of consensus on how to reach equity in students' participation	Present and discuss different strategies to promote equal participation. The "one size fits all" cannot be applied.
4	" How can I include gender contents in my gender-neutral subject?" (STEM participants)	Indicate that STEM subjects are not gender-neutral and behind any technology or strategy one can find users , beneficiaries or conceptualists (among others), what represents a source of gender-biased concepts and an opportunity to promote gender equality.
5	Fear against students' and mates' resistances	Promote a gradual and natural introduction of gender dimension, while realising that the subject benefits from it. Sometimes it is easier when the word 'gender' is changed by ' human ' in order to gain acceptance within the non-gender-awareness teaching staff.
6	Difficulties in making gender explicit in the teaching guide	Provide a sustained support on the transformation of the teaching guide. Do not rush the participants.
7	Lack of time	Define a minimum participation to reach the training certificate as a pressure measure for the lack of self-regulation scenario (Barak et al., 2016). The University and the Administration should define some incentives for educators by putting in value teaching activities in their professional assessment.

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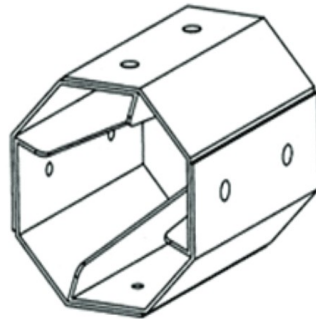
Subject: machinery & mechanization

Journal of AgriSearch, 8 (1): 30-34
An Open Access International Peer Reviewed Quarterly

ISSN : 2348-8808 (Print), 2348-8867 (Online)
<https://doi.org/10.21921/jas.v8i01.19560>

Ergonomic Evaluation of Hand Operated Maize Sheller for Reducing Drudgery of Farm Women in Bihar

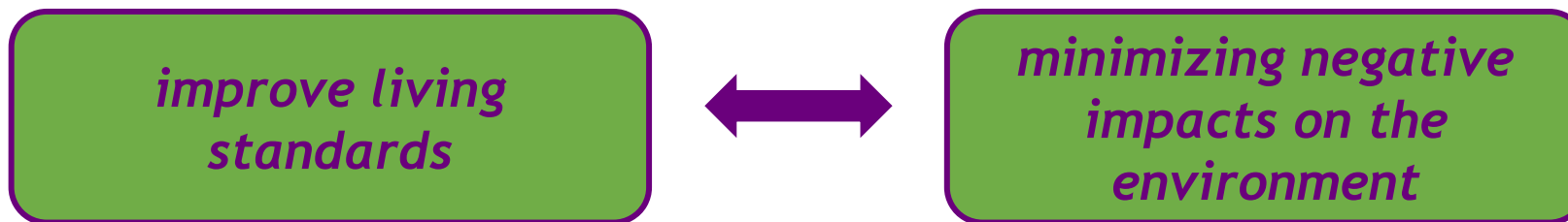
BIKASH SARKAR, PREM K SUNDARAM*, AP ANURAG, RAKESH KUMAR, UJJWAL KUMAR,
A RAHMAN AND AUPADHYAYA



Enginyeries Agraries: guies per a una docència universitària amb perspectiva de gènere. [Raigón Jiménez, María Dolores \(Xarxa Vives d'Universitats, 2022\)](#)

Concept: Appropriate technology

- ✓ *Suitable for the specific social, economic and environmental conditions of a particular community or context.*
- ✓ *Sustainable solutions (often simple, affordable, and adaptable)*
- ✓ *Prioritise accessibility, local participation and empowerment.*



Case study: cooking in a Sub-Saharan Africa

Impacts:

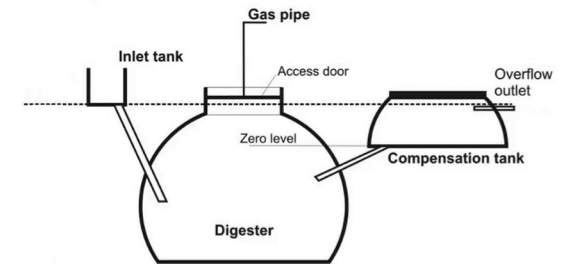
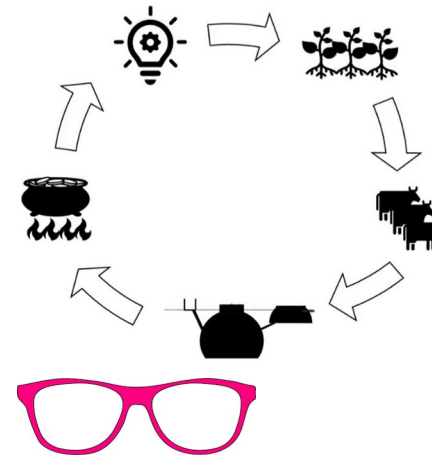
- ❑ *Deforestation - loss of biodiversity, soil erosion, and reduction of CO2 sequestration - climate change!*
- ❑ *Indoor air pollution - respiratory diseases - women and children!*
- ❑ *time and labor intensive: loss of opportunity!*



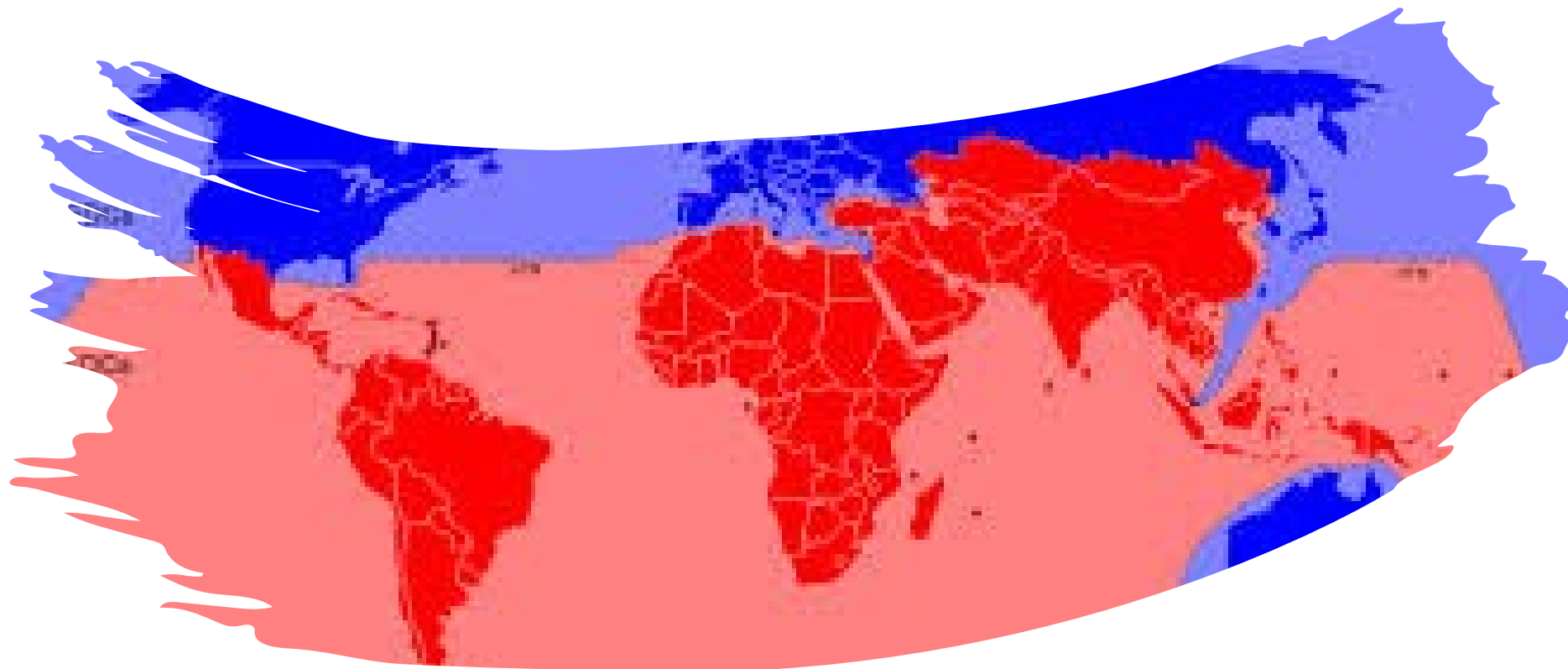
Case study: cooking in a Sub-Saharan Africa

Appropriate technology: Biogas technology

- ✓ *From organic waste to usable energy*
- ✓ *Reforestation*
- ✓ *New time distribution*
- ✗ **Risk:** *gendered norms (decision, benefits)*
- ✓ **Vertical and horizontal coalitions:** *women in management operation and decision-making processes*
- ✓ **Shift power dynamics** *within households and communities*



Different contexts



Global North and Global South

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Subject: machinery & mechanization

Ergonomics and the Development of Agricultural Vehicles

W. Kyle Dooley

For presentation at the 2012 Agricultural Equipment Technology Conference
Louisville, Kentucky, USA 13-15 February 2012

Ergonomics for Gender Friendly Farm Equipment to Enhance Better Human-machine Interaction

Shiv Pratap Singh, M. K. Singh, Mukesh K. Singh and U. Ekka

Division of Agricultural Engineering, ICAR-IARI, New Delhi-110012, India

RASSA Journal of Science for Society 1(1&2): 54-59, April & September 2019

The best possible ergonomic match maximizes an operator's effectiveness, comfort and system safety. For every ergonomic mismatch, you are deducting from your ideal productivity, costing time and money.



Subject: irrigation engineering

www.water-alternatives.org

Zwarteveen, M. 2008. Men, masculinities and water powers in irrigation. Water Alternatives 1(1): 111-130

Volume 1 | Issue 1



Men, Masculinities and Water Powers in Irrigation

Margreet Zwarteveen

Irrigation and Water Engineering Group, Wageningen University, the Netherlands; margreet.zwarteveen@wur.nl



Enginyeries Agraries: guies per a una docència universitària amb perspectiva de gènere. [Raigón Jiménez, María Dolores \(Xarxa Vives d'Universitats, 2022\)](#)

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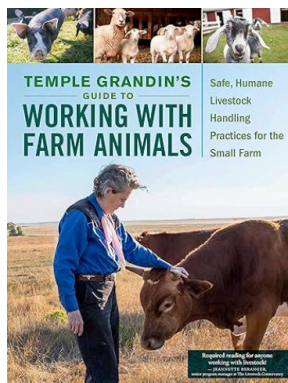


Female role-models



Mary Temple Grandin (1947)

Her innovative designs for livestock handling facilities have revolutionized the way animals are handled and processed in the agricultural sector.



Louise Fresco (1952)

Her work focuses on the intersection of science, technology, and society, particularly in the context of food production.



Mary-Dell Chilton (1939)

Her work on plant genetic engineering has been instrumental in the development of genetically modified crops, significantly impacting the agro-food industry.



August 17, 2022

4 Women Scientists Breaking Down Barriers to End Hunger

Female role-models



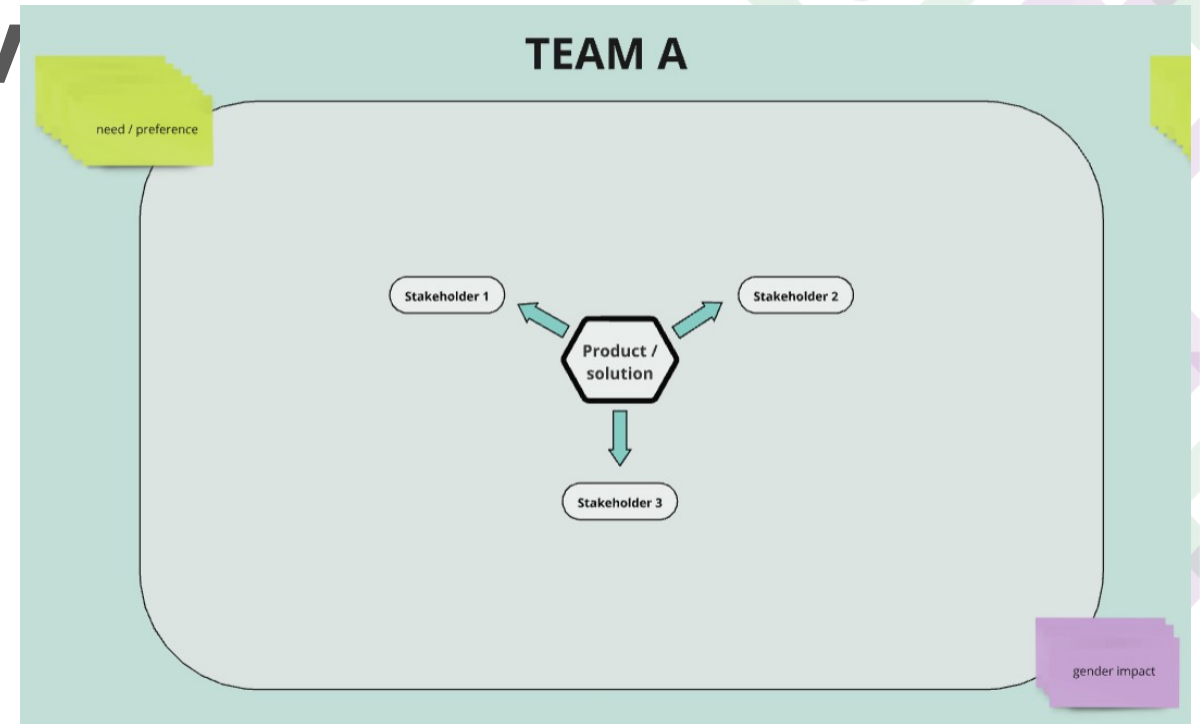
2023 (3)

Activity 3: stakeholders – social relev

Product – solution of a problem:

- Design of a genetically modified crop
- Design of a tractor
- Design of the irrigation strategy for an agricultural area

Time	Program
5 min.	Choose a product/solution
5 min.	Identify 3 stakeholders
15 min.	Identify needs and preferences for each stakeholders. Is gender relevant?
10 min.	Sharing and wrap-up



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- 1. Regulations**
- 2. Institution**
- 3. Staff**

Regulations

The Spanish case:

❑ Several laws on education and, specially University education, include:

- ✓ Equality principles
- ✓ Gender dimension in teaching and research
- ✓ Transversal gender competence

❑ But....the real level of inclusion of the gender perspective is low

Regulations

❑ Pioneering initiative in 2018 (Spain):

***General framework for incorporating the
gender perspective in higher education
teaching***

- To be applied in all degree programmes at Catalan universities
- In assessment, monitoring, modification and accreditation



Catalan University
Quality Assurance
Agency

Regulations → guides

General learning outcomes

- Students can carry out research with a gender perspective:
 - They can distinguish the effects of the variables sex and gender in theoretical and empirical analyses.
 - They can identify the contributions of gender studies to the subject of their research.
 - They produce, compile and interpret empirical data in a gender-sensitive way.
 - They can create and use qualitative and quantitative indicators, including statistics, to gain a better understanding of gender inequality and the different needs, circumstances, values and aspirations of women and men.
- They can identify the intersection of gender inequality with other dimensions of inequality (age, class, race, sexuality and gender identity/expression, ableness, etc.).
- They can identify and are able to analyse the structural causes and effects of violence against women and other types of gender-based violence.
- They are familiar with and use the contributions of women and gender studies in their discipline.
- They identify and problematize gender roles, stereotypes and biases in their discipline or the exercise of their profession.
- Their use of language is inclusive and non-sexist. Their use of language is inclusive and non-sexist.

Regulations → guides

504 – Agriculture, Forestry and Fishing

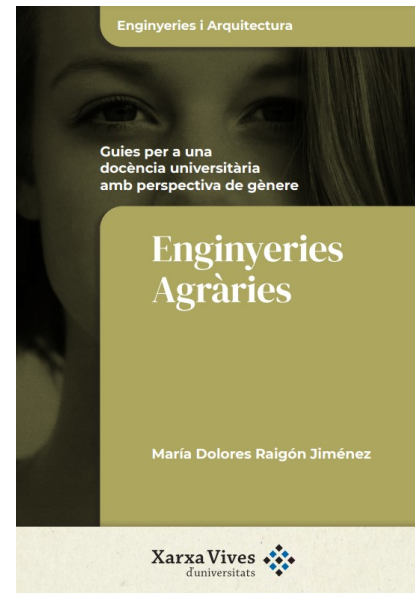
(Agriculture and Food Production; Forestry)

- Students understand the role of women in service companies, as service providers and as customers.
- They recognise the links between products and the traditional division of unpaid work, with domestic work still being socially assigned to women.
- They can analyse and take into account the role of women when developing markets for food products and selling them and the ways in which consumption patterns are determined by factors related to gender.
- They consider inequalities in the design of agricultural, forestry and fishery projects including those for development cooperation.

Regulations → guides

Guides of the Vives University Network for university teaching (Spain)

- ❑ First guides published in 2018. At present: 29 guides (11 in STEM fields)
- ❑ Recognized by the European Institute for Gender Equality (EIGE) as an example of good practice in its [GEAR Toolkit](#)



Xarxa Vives
d'universitats

**Agricultural
engineering
(2022)**

Institution

- ☐ GEP with a devoted action of Gender in Teaching.
- ☐ Available resources and guidelines (web, guides, ...).
- ☐ Gender in Final Degree Projects. Awards.
- ☐ Gender-specific subjects. Mandatory versus elective subjects.
- ☐ Devoted vice rectorate, Equality Unit and Committee, Gender experts (Faculty/Department).
- ☐ Gender-specific competence and learning outcomes (apart from the sustainability one).
- ☐ Create the Teaching innovation day (with gender dimension in teaching).
- ☐ Teaching innovation projects with gender dimension.
- ☐ Trainings for educators (from an overview to a real transformation of the syllabus).
- ☐ Recognition of the gender implication (in the assessment of excellence).

Agricultural Studies

Also relevant for Natural Resource Management, Ecology, Food Studies, Development Studies, Environmental and Sustainability Studies

Course: Agricultural Studies, Rural Development, Rural Economy
 Group of courses: Agricultural, Forestry and Nutritional Studies
 Provided by: Prof. Dr. Christine Bauhardt, M. A. Meike Brückner
 Last edit: Prof. Dr. Christine Bauhardt, M.A. Meike Brückner, July 2018

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Institution

Trainings for educators → transformation of the syllabus

Basic guide review

Inclusive and non-sexist language.

Gender competences.

Bibliography with full names.

Classroom management (glimpsing rotating roles, etc.)

Assessment with gender equality (diverse tools, etc.)

Backstage work: a new gender activity

Focus on minimum one activity to include gender dimension.

Wildcard:

Fundamentals: female contributions.

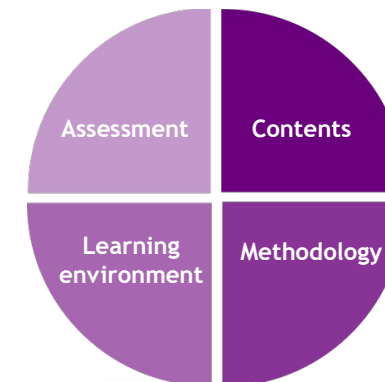
Technologies: teamwork project or challenge.

Management: case study or role-play.

Extended guide review

Make gender aspects explicit in the subject's general description and the contents.

Include at least one learning output and the corresponding assessment related to the new gender activity.



Institution

Gender in Final Bachelor/Master Degree Projects

Required studies:

1. economical,
2. environmental,
3. social and **gender equality**

- ☐ Format: Language, images, female authors in references
- ☐ Teamwork: gender distribution, roles, ...
- ☐ Methodology: gender/sex as variable of the study
- ☐ Results: Impacts, potential biases


Treball de Fi de Grau/Màster (sempre en català, Arial 14)

Titulació (sempre en català, Arial 18)

Títol Títol Títol Títol (Arial 20)

MEMÒRIA
(MEMORIA en castellà, REPORT en anglès)

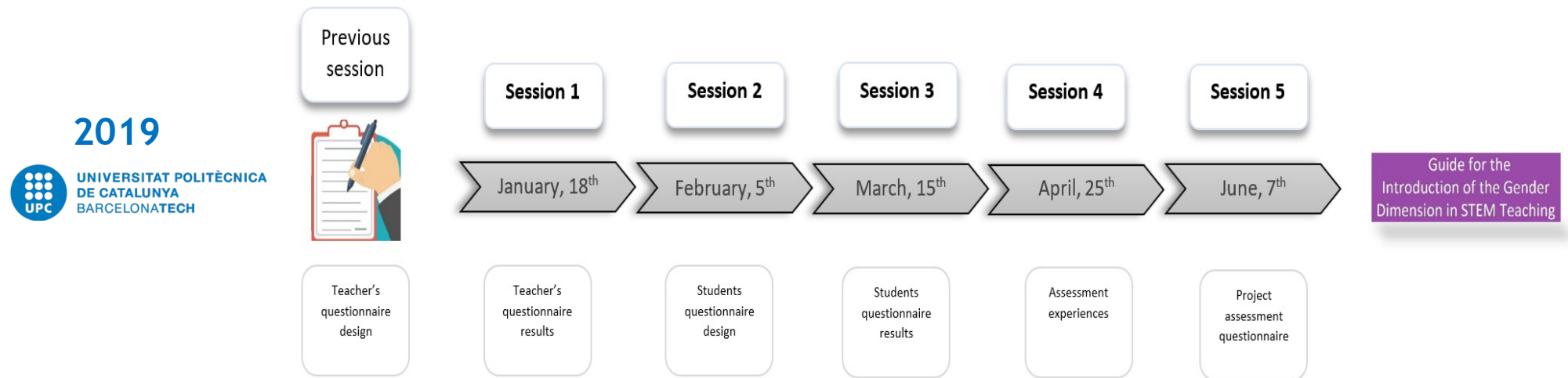
Autor/a: Nom i cognoms estudiant (Author)
Director/a: Nom i cognoms director/a (Supervisor)
Co-director/a: Només si n'hi ha (Co-supervisor)
Ponent: Només si el director/a no és prof. de l'Escola (Ponente/Tutor)
Convocatòria: Mes Any (Convocatoria/Call)


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**UNIVERSITAT POLITÈCNICA
 DE CATALUNYA**
BARCELONATECH

Staff

- ❑ Keep your teaching alive (and monitor it). Reminder: the four pillars.
- ❑ Disseminate your experiences (within your mates and abroad).
- ❑ Participate in the teaching innovation projects with gender dimension (raise awareness, sharing experiences, reaching transformation, spreading expertise).



Contents

1. Agrifood systems context
2. Gender in teaching
3. Agrifood systems examples
4. Towards the institutional transformation
- 5. Recommended readings**
6. Final remarks



Recommended readings

- [Top 10 reads on women's work in agri-food systems](#), Nyati Singaraju, CGIAR GENDER Impact Platform, 28th June 2023
- [Enginyeries Agraries: guies per a una docència universitària amb perspectiva de gènere](#). Raigón Jiménez, María Dolores. Xarxa Vives d'Universitats, 2022
- [Agricultural Studies](#). Syllabus by Prof. Dr. Christine Bauhardt, M.A. Meike Brückner, July 2018
- [Toolkit for Integrating Gender-Sensitive Approach into Research and Teaching](#), Jovana Mihajlovic Trbovc and Ana Hofman, Garcia Working Papers n. 6, 2015
- [Gender equality in academia and research](#). GEAR tool, European Institute for Gender Equality, 2016
- [A guide for Gender Equality in Teaching Education Policy and Practices](#), United Nations Educational, Scientific and Cultural Organization, 2015
- [Guide of Industrial Engineering to mainstreaming gender in university teaching](#), Elisabet Mas de les Valls and Marta Peña, Xarxa Vives d'universitats, 2020

Recommended readings

☐ STEM vocations:

- Milagros Sáinz et al. (2020) [*Gendered Motivations to Pursue Male-Dominated STEM Careers Among Spanish Young People: A Qualitative Study*](#). *J. of Career Development* 47 (4): 408-423
- Susana González-Pérez et al. (2020) [*Girls in STEM: Is It a Female Role-Model Thing?*](#) *Frontiers in Psychology*, vol. 11, 2204

☐ Assessment:

- Rasooli A, Zandi H, DeLuca C (2018) [*Re-conceptualizing classroom assessment fairness: A systematic meta-ethnography of assessment literature and beyond*](#). *Stud. Educ. Eval.* 56: 164–181
- Sarah I. Hofer (2015) [*Studying Gender Bias in Physics Grading: The role of teaching experience and country*](#), *International Journal of Science Education*, 37:17, 2879-2905
- Filip Dochy, Mien Segers and Dominique Sluijsmans (1999). The use of self-, peer and co-assessment in higher education: A review. *Studies in Higher Education* , 24:3, 331-350.
- Menucha Birenbaum and Rose A. Feldman (1998). Relationships between learning patterns and attitudes towards two assessment formats, *Educational Research*, 40:1, 90-98

Recommended readings

❑ (...) Assessment:

- Tuomas Pekkarinen (2015). Gender differences in behaviour under competitive pressure: Evidence on omission patterns in university entrance examinations. *J. Econ. Behav. Organ*, 115, 94–110
- Gerhard Riener and Valentin Wagner (2017). [Shying away from demanding tasks? Experimental evidence on gender differences in answering multiple choice questions](#). *Econ. Educ. Rev.*, 59, 43–62

❑ Reflection:

- Tamar Heijstra et. al. (2017) *Testing the concept of academic housework in a European setting: Part of academic career-making or gender barrier to the top?*. *EERJ*, vol. 16 (2-3) 200-214

❑ Methodology and classroom management:

- Laura Hirshfield and Milo D. Koretsky. (2018). *Gender and Participation in an Engineering Problem-Based Learning Environment*. *Interdisciplinary Journal of Problem-Based Learning*, 12(1).

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Final remarks

- ❑ The **agrifood** context is still male dominated → actions are required.
- ❑ Gender dimension can be included in **all subjects** (4 pillars).
- ❑ **Guides and tools** are widely available.
- ❑ Resistances will appear → a **sustained support** by the institution is required.
- ❑ Teaching innovation projects must be promoted by the institution to reach a **natural and bottom-up transformation**.

Exit questionnaire

Your opinion is important to us!

QR code or short link



Hands-on in Including Gender in Agrifood Systems Teaching

Date

Facilitator's name and email address

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