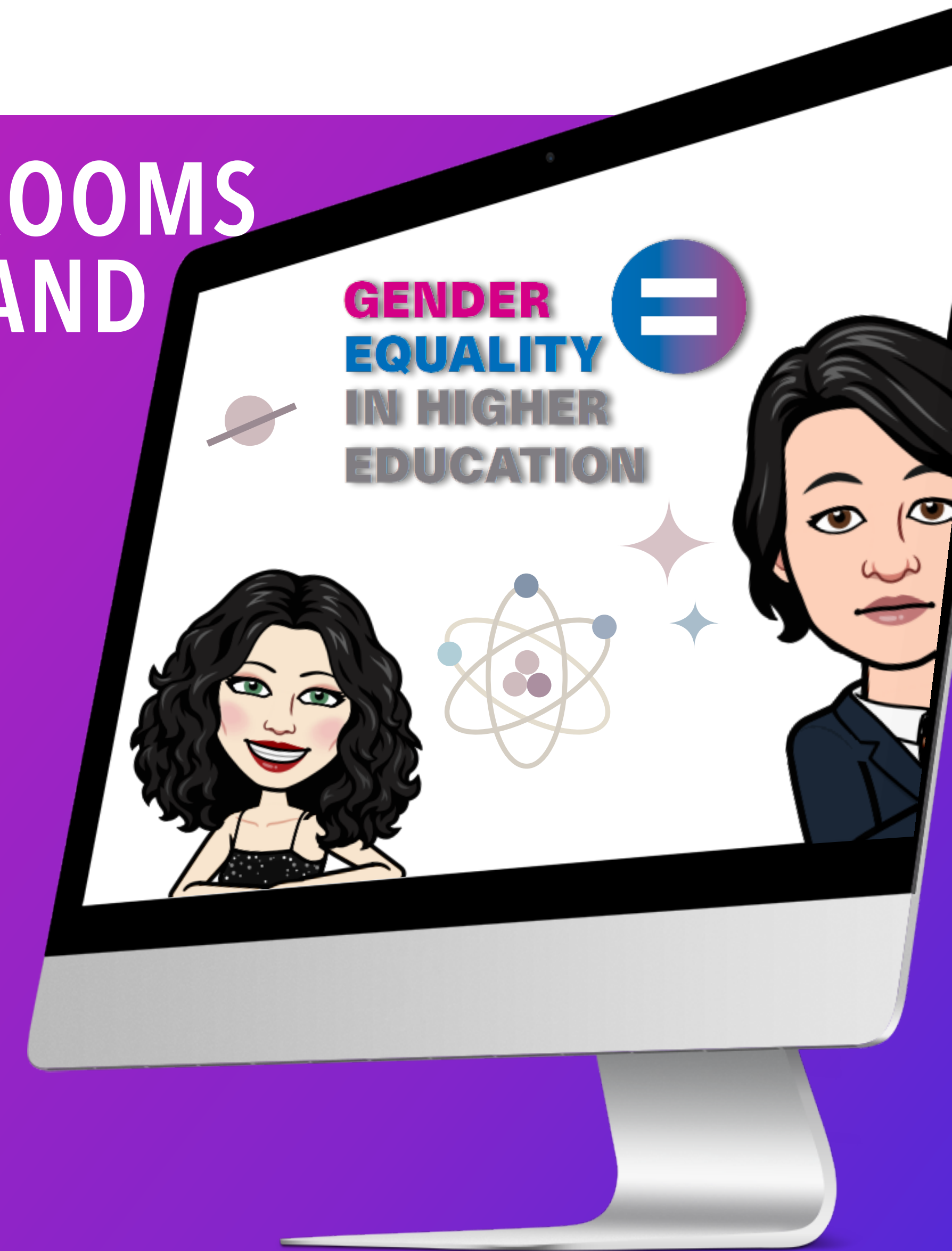


STRATEGIES TO DYNAMIZE VIRTUAL CLASSROOMS USING FEMALE ROLE MODELS IN SCIENCE AND TECHNOLOGY

CRISTINA FERNÁNDEZ ARAGÓN
ESTÍBALIZ PÉREZ ASPERILLA
CORAL GONZÁLEZ GARCÍA

Universidad a Distancia de Madrid (UDIMA)



11th European Conference on Gender Equality in Higher Education

WHY DYNAMIZING VIRTUAL CLASSROOMS USING FEMALE ROLE MODELS IN STEM?

GENDER GAP IN STEM

GENDER STEREOTYPES
LACK OF VISIBILITY OF WOMEN IN STEM



CHALLENGES OF VIRTUAL LEARNING ENVIRONMENTS

ISOLATION
LACK OF MOTIVATION AND ENGAGEMENT



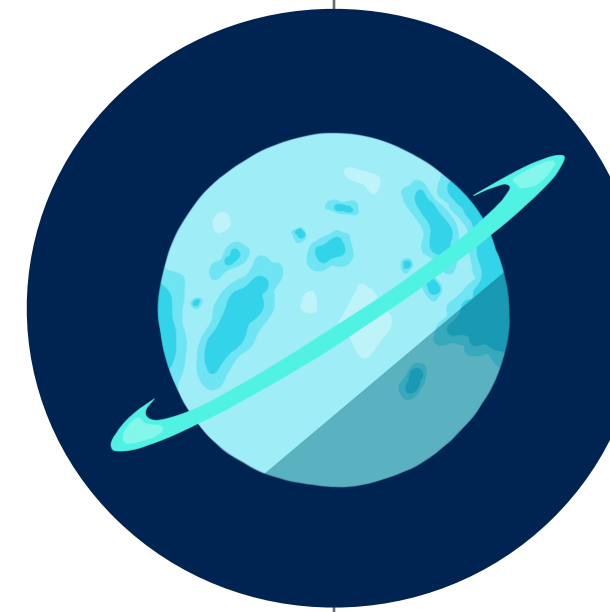
INCORPORATING THE GENDER DIMENSION TO...

TEACHERS' EDUCATION



NATURAL SCIENCES

DEGREE IN PRIMARY SCHOOL TEACHER TRAINING



BIOLOGY AND GEOLOGY COMPLEMENTARY TRAINNING

MASTERS DEGREE IN HIGH SCHOOL TEACHER TRAINING

MEDIA PROFESSIONALS' EDUCATION



RESEARCH IN DIGITAL MEDIA

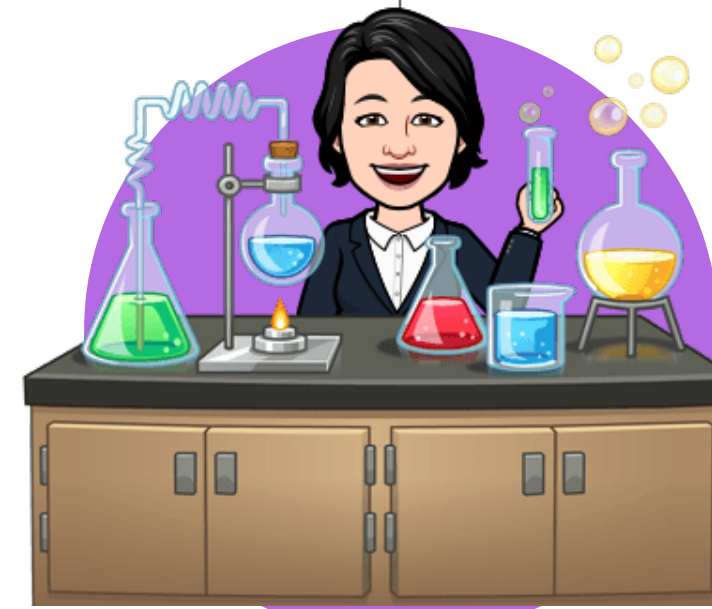
DEGREE IN JOURNALISM & DEGREE IN PUBLICITY

WHAT DO WE WANT TO ACHIEVE?



TO ENCOURAGE REFLECTION ON GENDER STEREOTYPES AND THE GENDER GAP IN STEM

TO GIVE VISIBILITY TO WOMEN IN STEM



TO BOOST MOTIVATION AND ENGAGEMENT

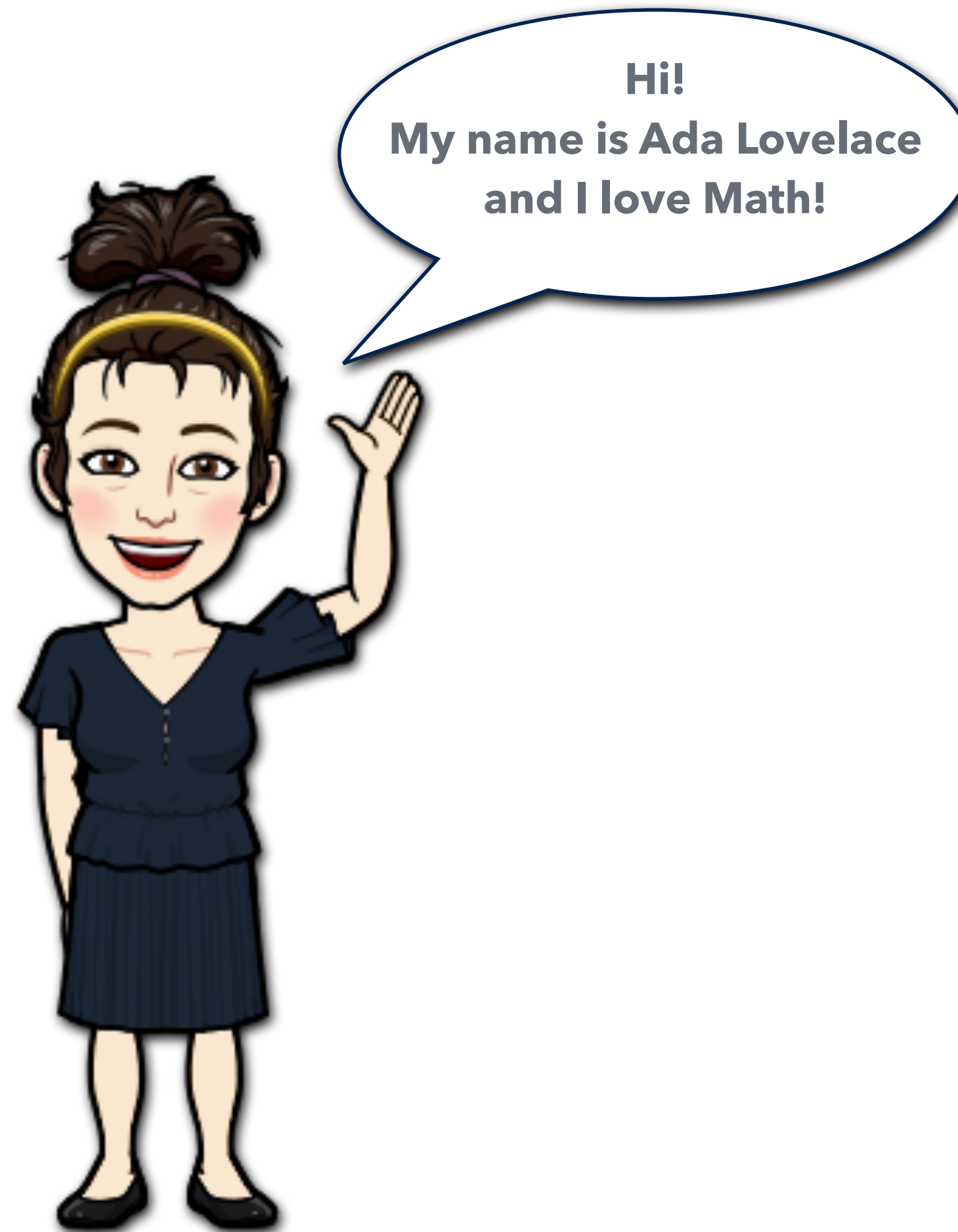


STRATEGIES USED TO DYNAMIMIZE THE VIRTUAL CLASSROOM

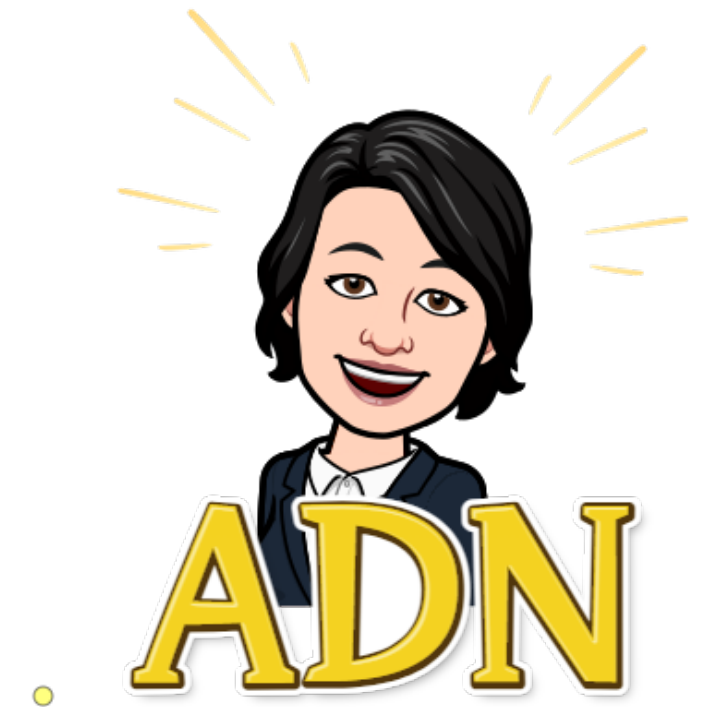
AVATARS

FEMALE MODELS IN STEM

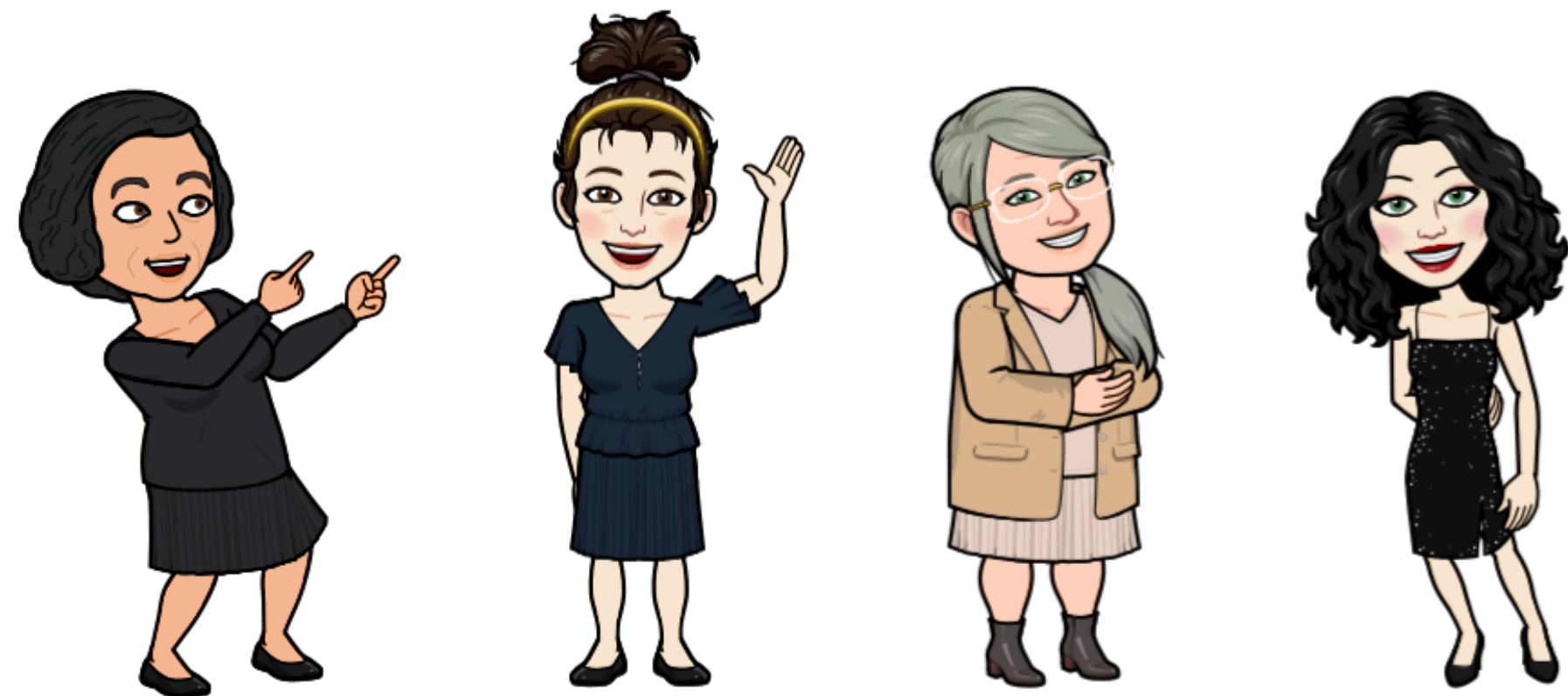
**ENHANCE CLOSENESS &
ENGAGEMENT**



STRATEGIES USED TO DYNAMIMIZE THE VIRTUAL CLASSROOM



Rosalind Franklin

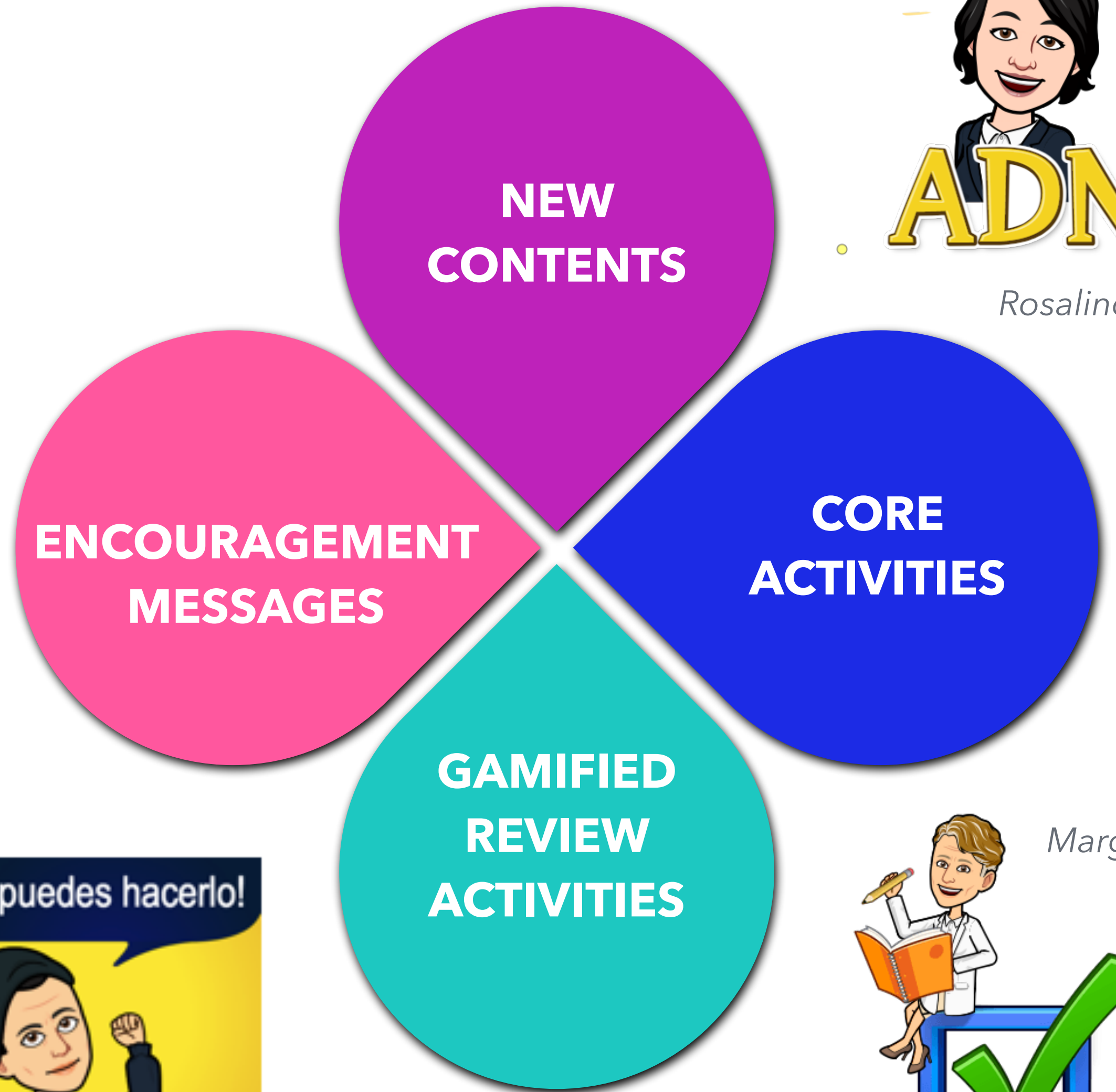


Ángela Ruiz Robles

Ada Lovelace

Radia Perlman

Hedy Lamarr

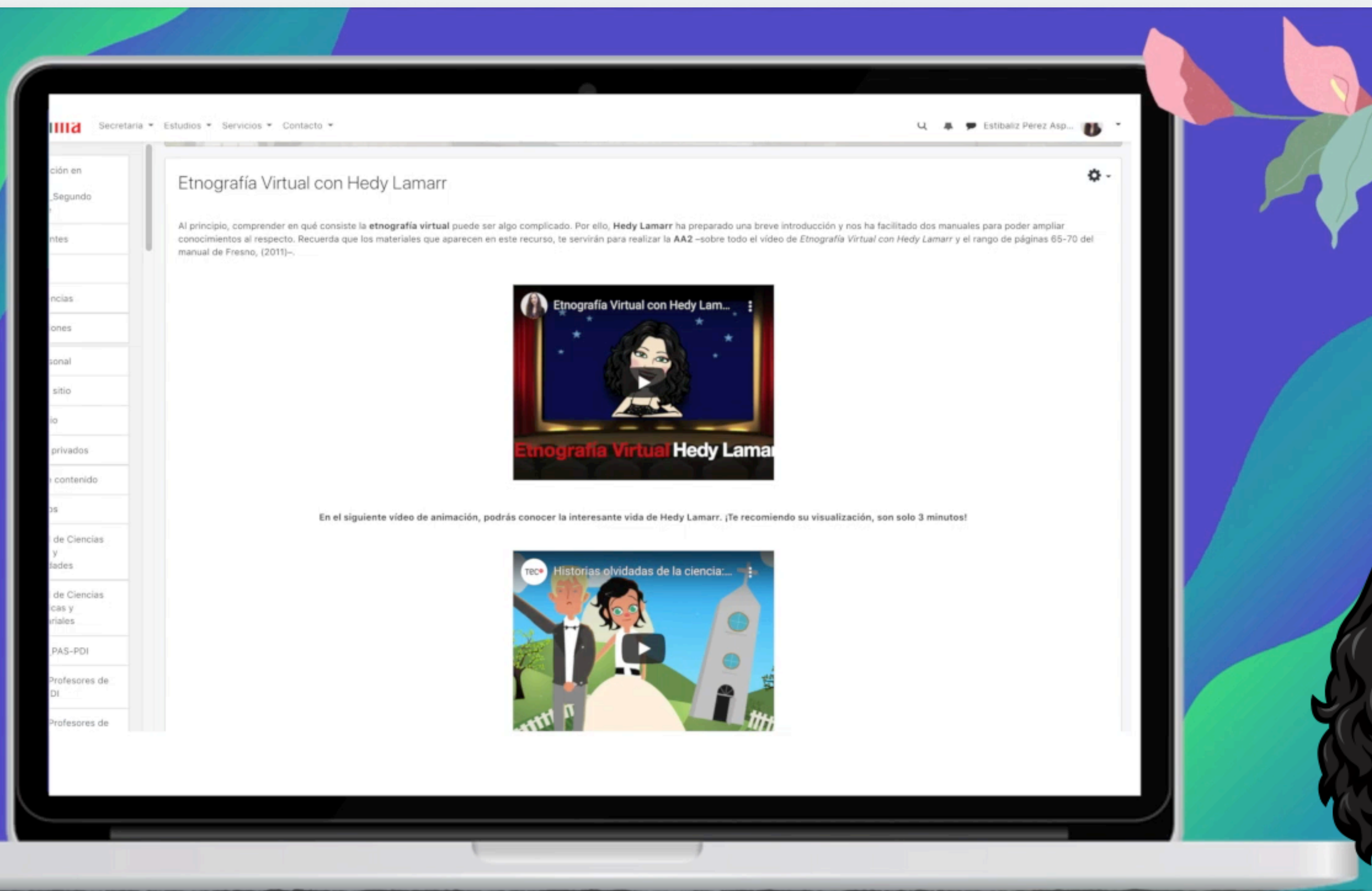


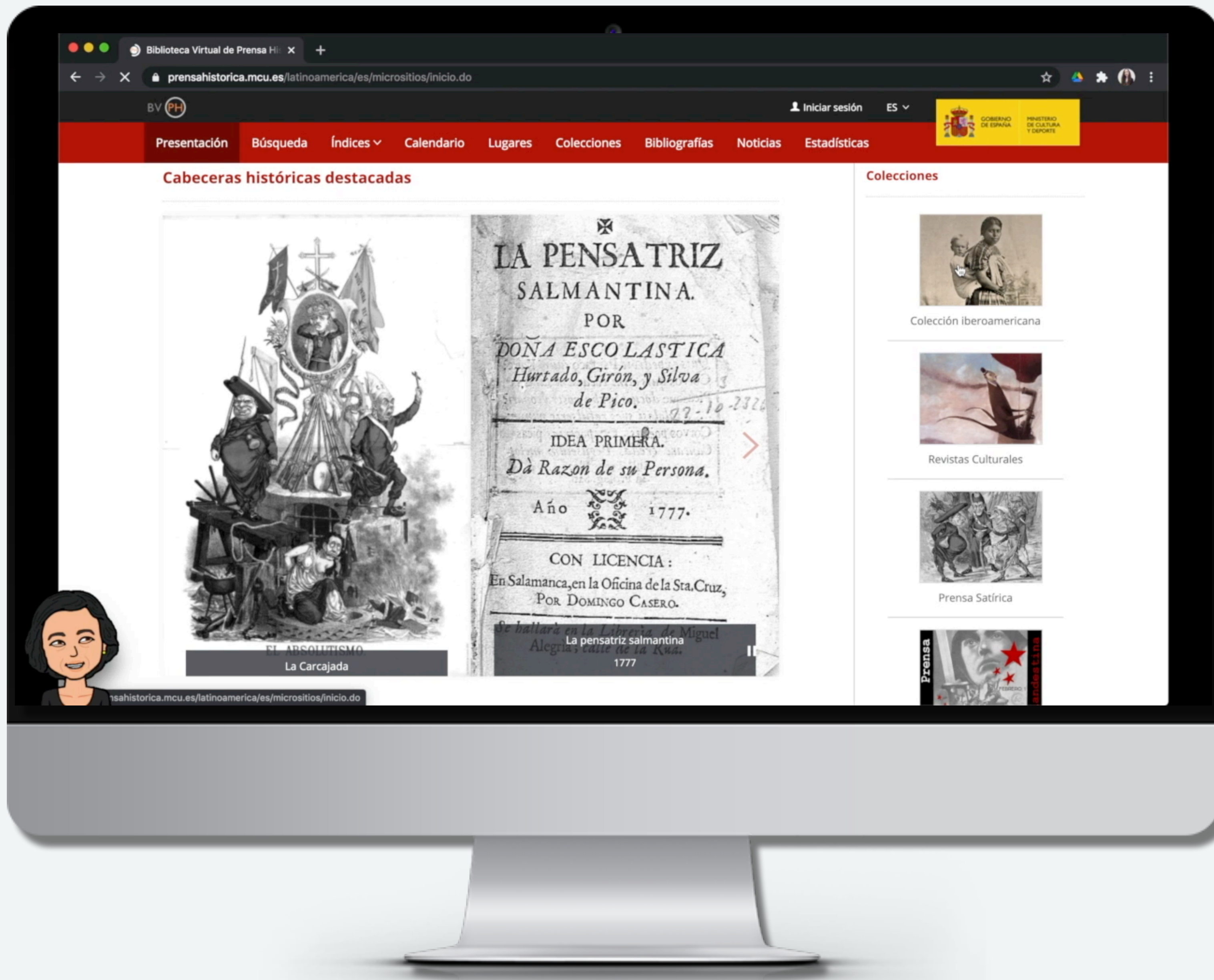
Mary the Jewess



Margarita Salas

NEW CONTENTS & BIOGRAPHIES

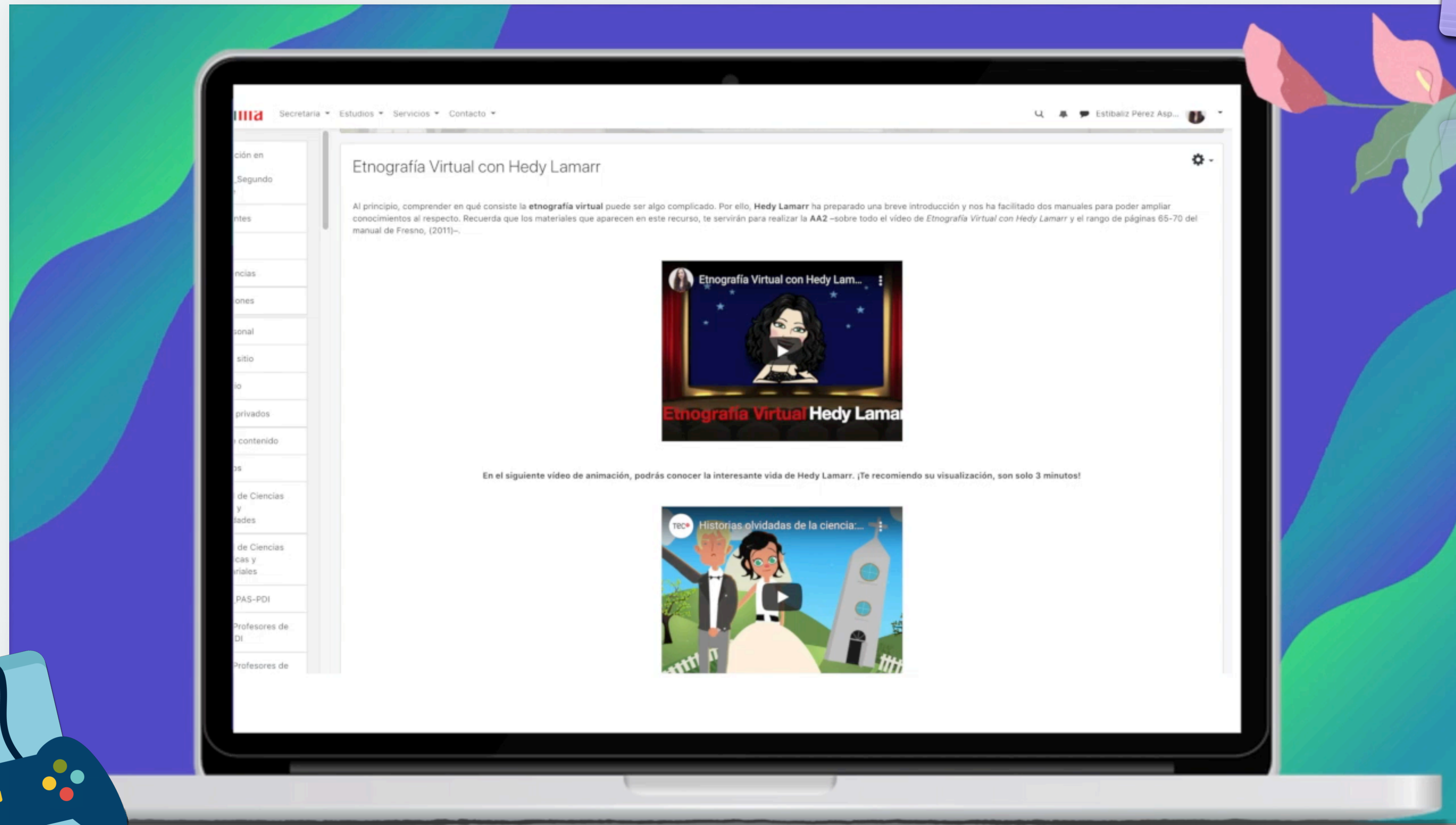




CORE ACTIVITIES' INSTRUCTIONS



GAMIFIED REVIEW ACTIVITIES



READERS CLUB & CINEMA CLUB




Actividad 4: (AEC1) Problemática ambiental

 Vídeo e instrucciones AEC1: Problemática ambiental

 Rachel Carson ¿Me conocías?



 Rúbrica actividad

 Documentación complementaria sobre educación en cambio climático

Material complementario (No evaluable). Recomendable para realizar la actividad

 Buzón de entrega de la actividad 4: AEC1. Problemática ambiental



WHAT WE HAVE FOUND SO FAR...

MOODLE METRICS

INTERVENTION vs CONTROL CLASSROOMS

USE OF THE LEARNING PLATFORM

USE OF DIDACTIC RESOURCES

PARTICIPATION



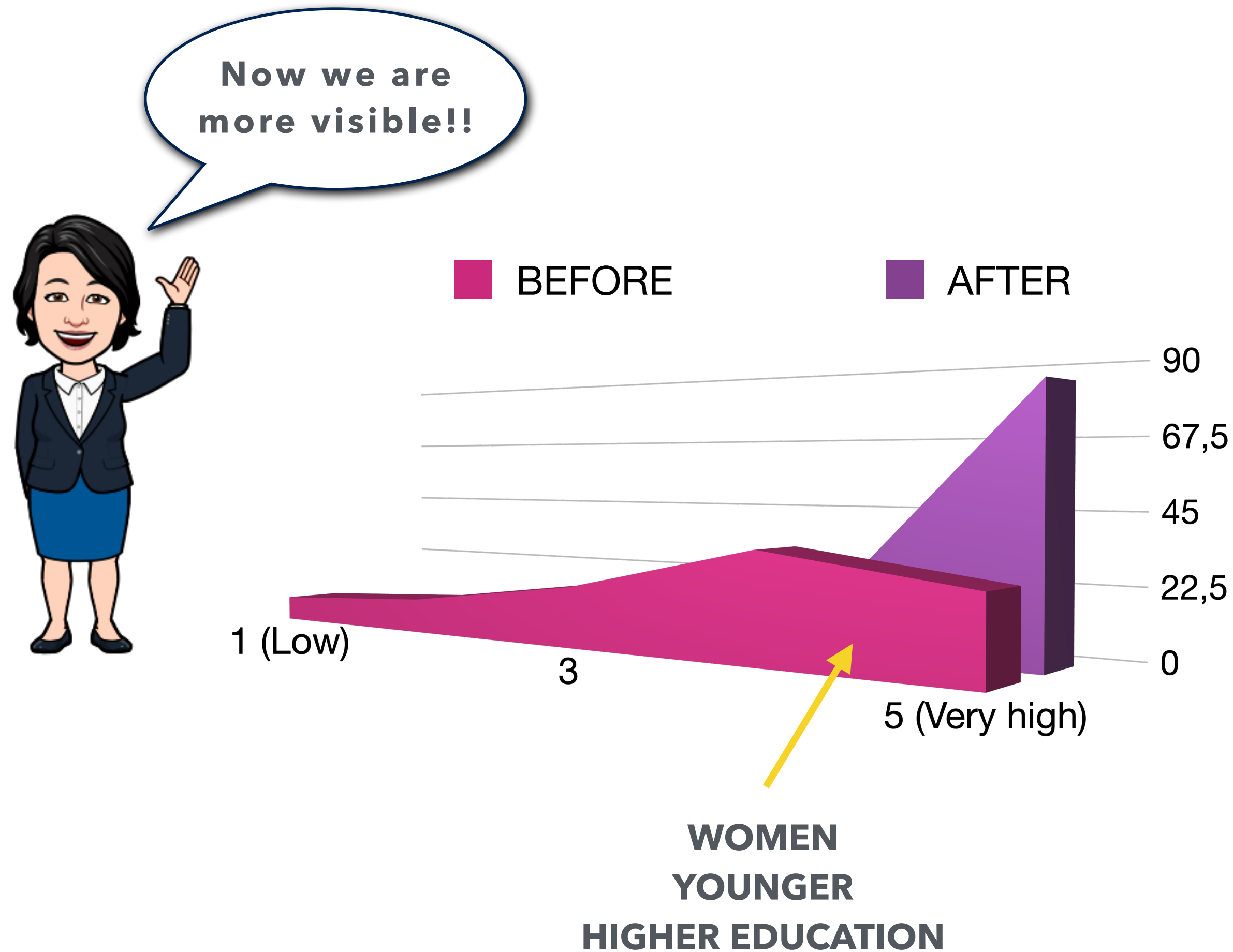
STRUCTURED SURVEY

LIKERT SCALE - DEGREE OF AGREEMENT WITH THE
QUESTIONS

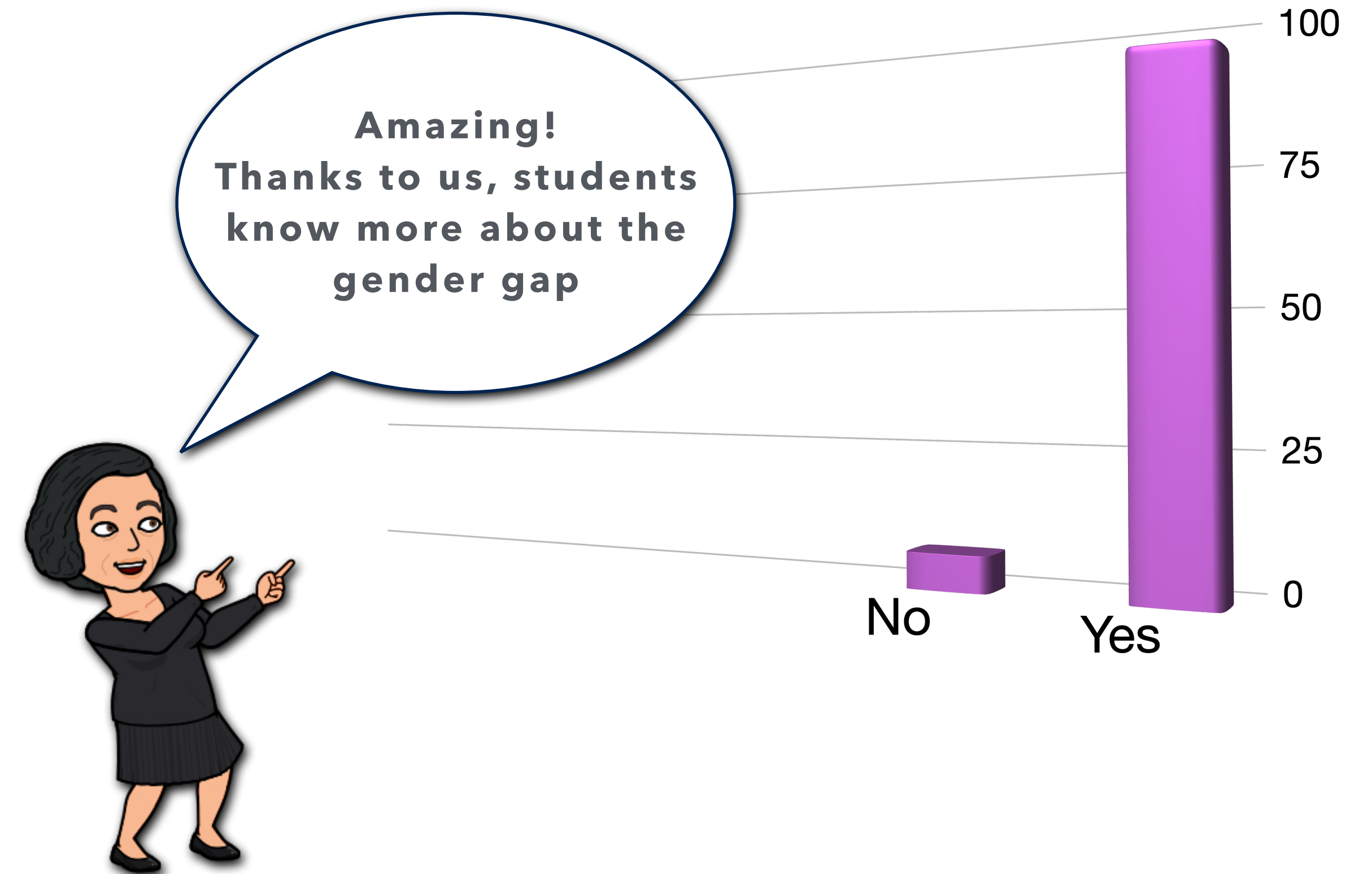
SOCIODEMOGRAPHIC DATA

WHAT WE HAVE FOUND SO FAR...

HOW WAS YOUR AWARENESS OF THE INVISIBILITY OF WOMEN IN STEM?

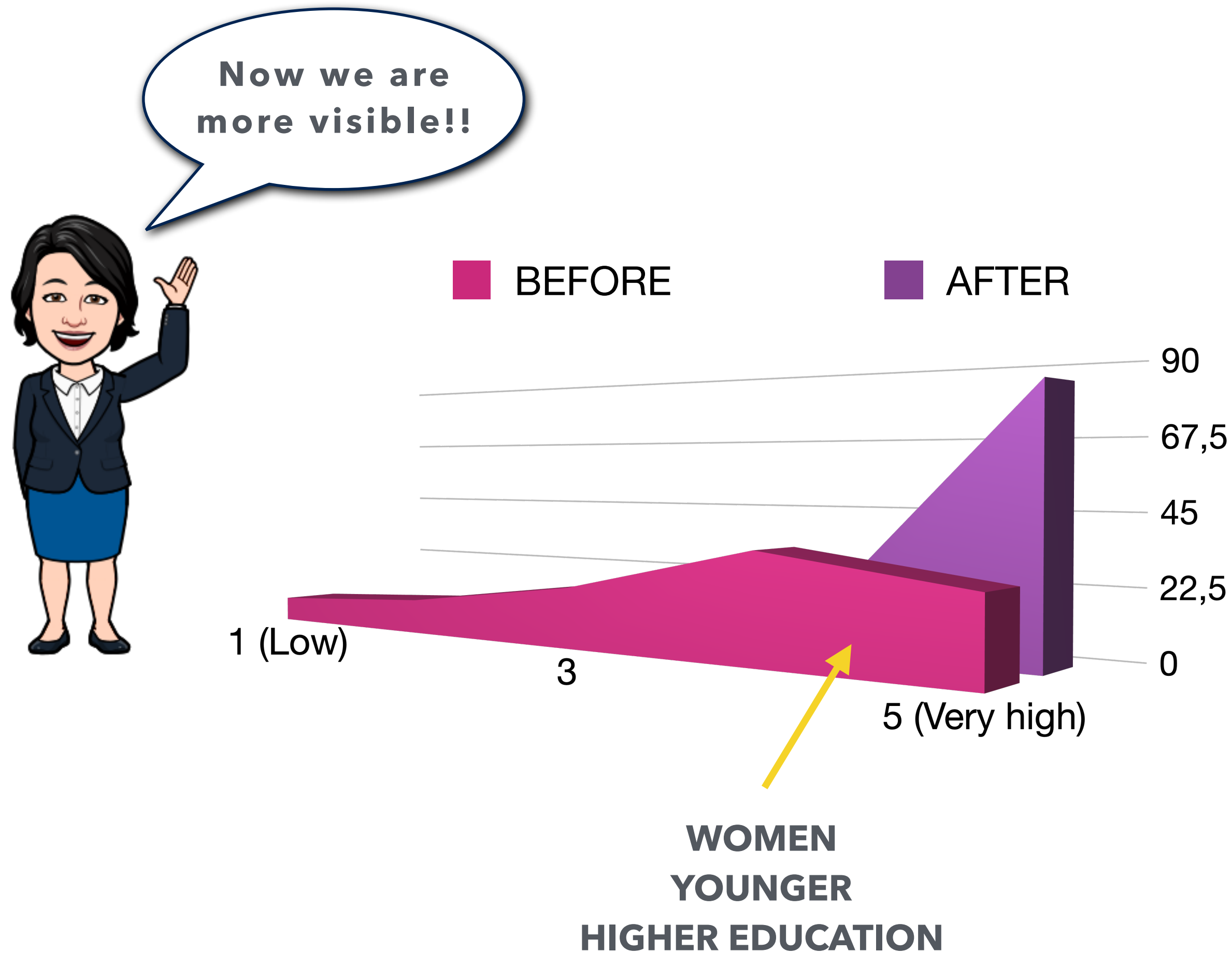


DID YOUR KNOWLEDGE ABOUT THE GENDER GAP IN STEM IMPROVED?

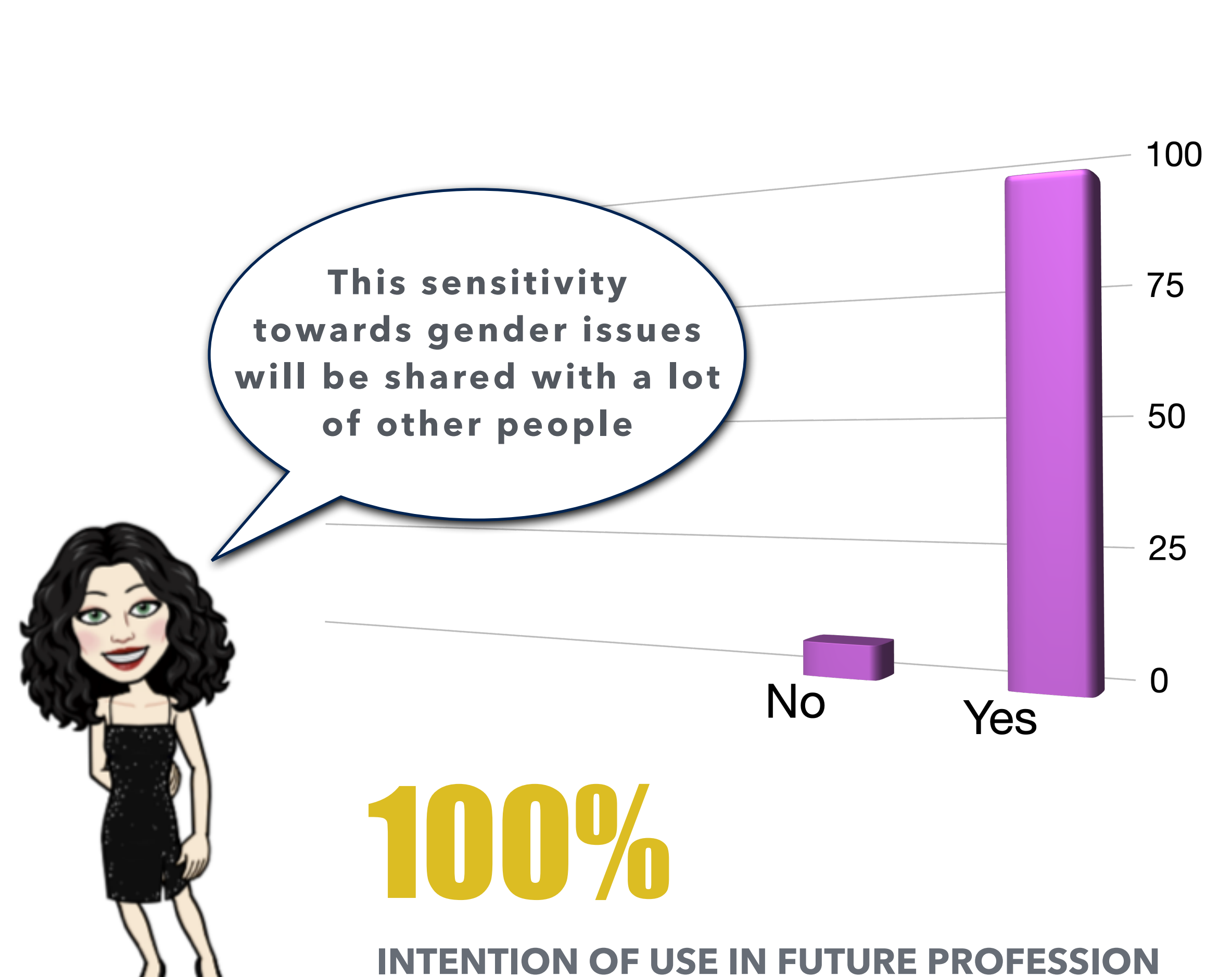


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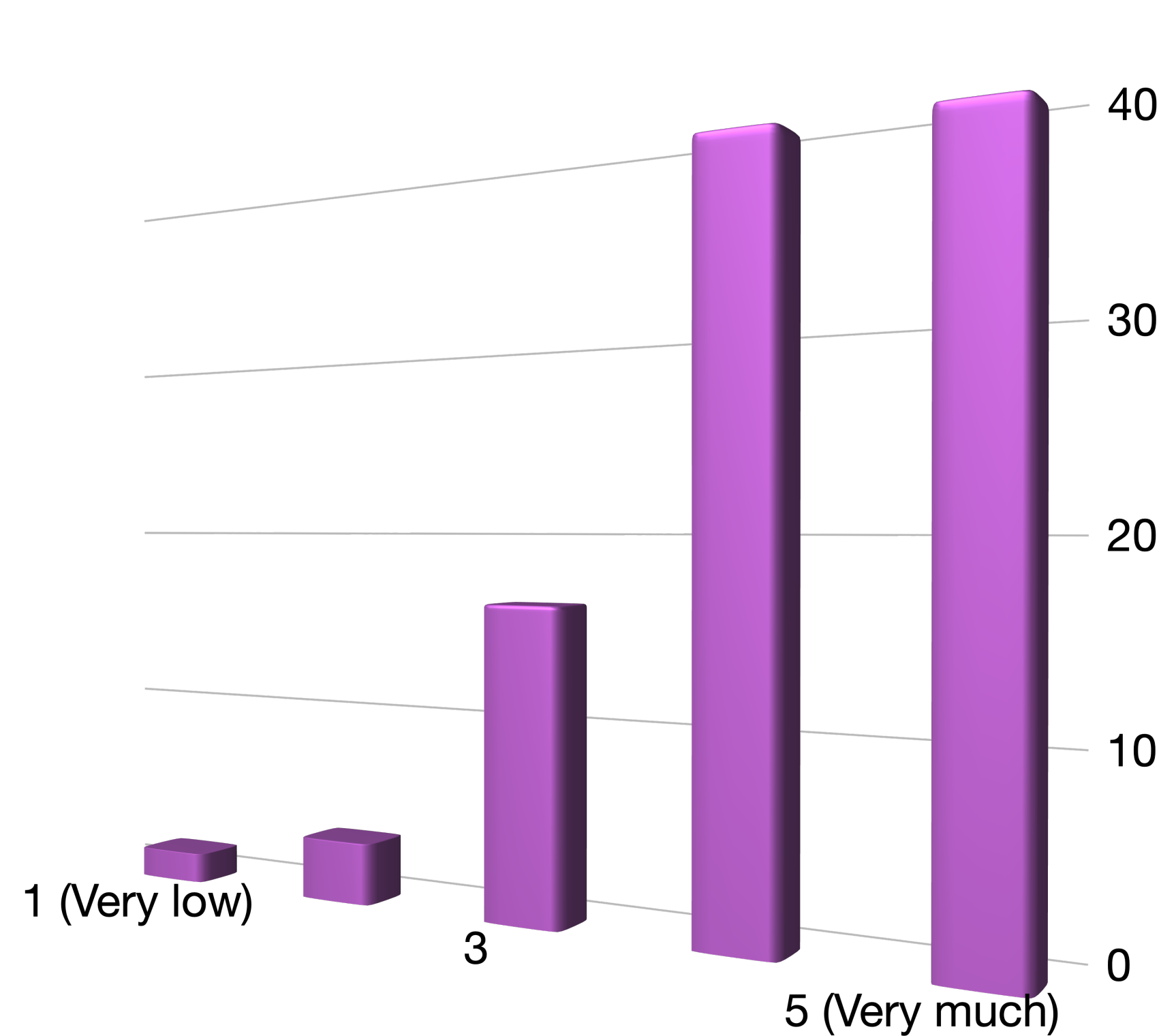


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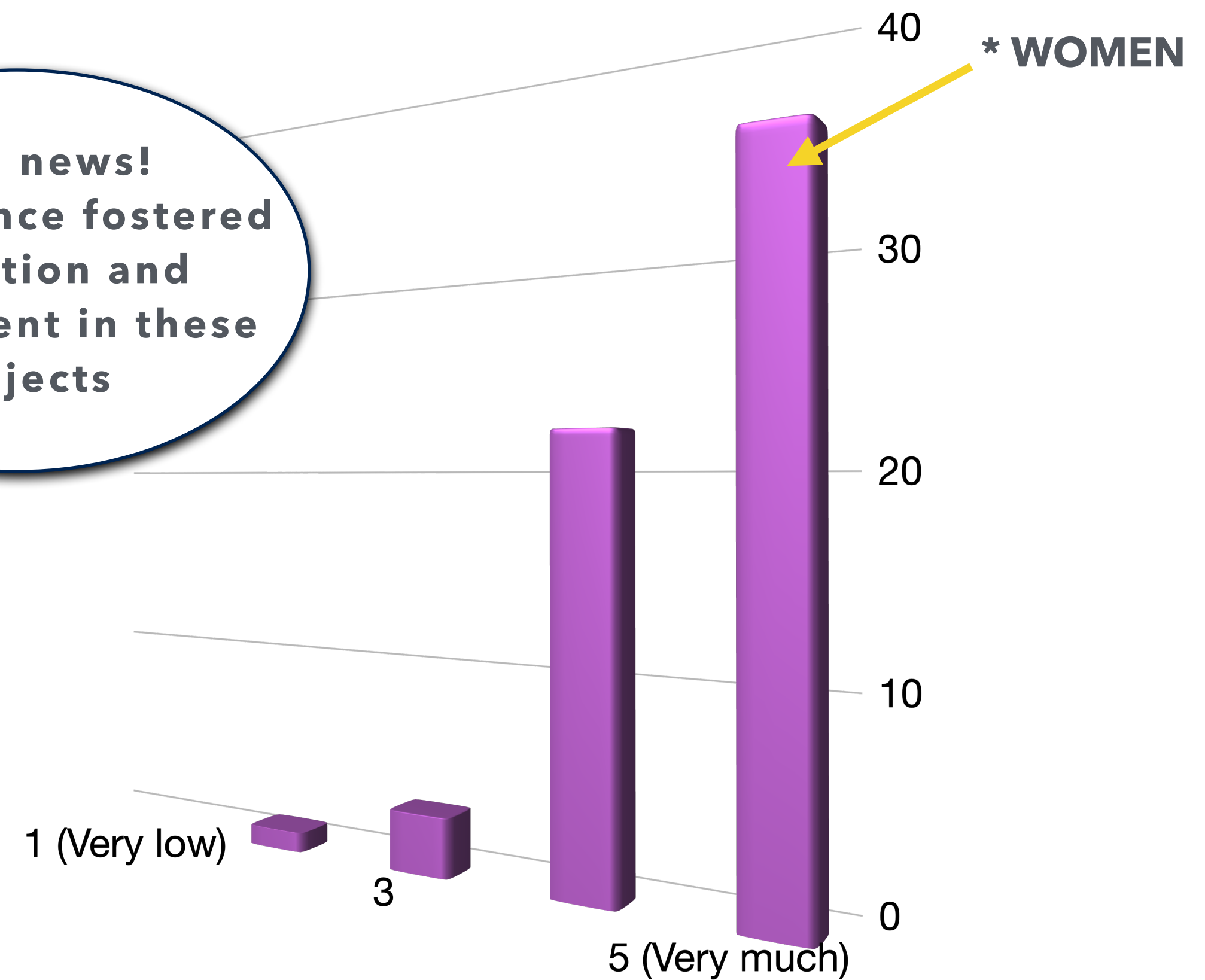


WHAT WE HAVE FOUND SO FAR...

DID THE AVATARS AND REST OF ACTIVITIES INCREASED YOUR MOTIVATION COMPARED TO OTHER SUBJECTS?



DID THE AVATARS AND REST OF ACTIVITIES INCREASED YOUR ENGAGEMENT COMPARED TO OTHER SUBJECTS?



Good news!
Our presence fostered
motivation and
engagement in these
subjects



CONCLUSIONS



STUDENTS GAINED AWARENESS AND SENSITIVITY TO GENDER-RELATED BIASES, GOT FAMILIAR WITH THE ROLE OF WOMEN IN STEM AND FOUND IT ALL USEFUL CAREER-WISE

THE STRATEGIES USED BOOSTED STUDENT'S MOTIVATION AND ENGAGEMENT ON THE VIRTUAL LEARNING ENVIRONMENT

INCORPORATING THE GENDER DIMENSION TRANSVERSALLY IS CAPITAL TO COUNTERACT GENDER STEREOTYPES AND TO FOSTER GENDER EQUALITY

¿Alguna pregunta?

THANK YOU!!



“I love this type of initiatives! I consider that they can open people’s eyes.”

Female, Biologist

“The subject was really interesting, it opened my eyes to things that had gone unnoticed to me before.”

Male, Environmentalist