Today’s Talk:
Inclusive avatars and narratives in biology simulations

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What Does a Scientist Look Like?
Current Science Labs?
Agenda

1: ASU Case Study
2: Inclusive Framework
3: What’s Next?
ASU is a comprehensive public research university, measured *not* by whom it excludes, but rather by whom it includes and how they succeed;
Inclusion in the onsite classrooms

Training faculty
- Universal Learning Design
- Microaggressions
- Transgender guidelines
- Mentoring for first year students
Explore Science, Research & Discovery

- Currently has 2000 students in the program
- Three Simulated Lab Courses
Labster offered:

● Expertise in VR technology
● Grants to support development
Labster challenges:

- Non-biologists designing simulations
  - ASU Faculty partnered and approved biology content
- Narrative training
  - Helping faculty understand how to tell a story
- ASU Inclusion Awareness
Concerns:

Gender
Power Dynamics
Concerns:

Stereotypes in a narrative
Concerns:

Microaggressions

https://www.lifescied.org/doi/10.1187/cbe.18-01-0011
Agenda

- 1: ASU Case Study
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Initial Training and Discussions

- Brought in experts for our meetings
  - Renee Klug, ASU’s International Educator
  - Sara Brownell, Inclusion in Biology Education
- Formed a team of faculty, staff and students and Labster community to review content
Group Norms and Guidelines:
- Process for reviewing
- Process for reporting
- Shared standards for any new simulations
8 Shared Standards

- Framework for language
- Framework for visuals

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<th>Peralta Online Equity Rubric</th>
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Equity Rubric developed as part of the Peralta Online Equity Initiative in collaboration with Kevin Kelly, EdD - rev. May 2019
Value Language: non-judgemental

**Description:** Use literal facts that are observable, not judgements or interpretations based on what someone thinks.

**Example:** Is this woman dressed appropriately for working in the lab?
Value Language: empathetic

Description: understanding and sharing of emotions and experiences from another person

Example: Doctor is understanding of an emotional choice by a patient and has an appropriate response
Value Diversity: Gender

**Description:** Awareness of power dynamics, stereotypes, use of non-binary avatars

**Example:** Women and people of color shown as lead researchers not assistants
Value Diversity: Family Structure

Description: Use non-traditional families that include single moms, grandparents, same sex parents

Example: Reciprocal IVF where one partner’s eggs are used to create embryos, and carried by the other parent
Value Diversity: Race

Description: Use diverse avatars and avoid stereotypes

Example: Avatars are black and hispanic scientists
Value Diversity: Culture

**Description:** Avatars show respect for community traditions and elders

**Example:** Indigenous people are shown accurately, and interactions are respectful towards community
Value Diversity: Religion

Description: Scientists should reflect a broad range of religions and respect diverse beliefs.

Example: Avatars are shown with a kippot or hijab.
Value Diversity: Abilities

**Description:** Avatars shown with a disability and working in accessible labs

**Example:** Adjustable lab tables to accommodate wheelchairs, use of listening devices, and closed captioning
Agenda

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Results: Moving Forward

- Fewer student complaints regarding inclusivity in our simulations
- Still not perfect, but improving
- New developments start with this framework
- Faculty awareness of issues
“created guidelines for designing more inclusive simulations (e.g. characters, conversations, storylines) that all content designers follow right now, so that has been integrated not only in the simulations we are developing in collaboration with ASU but also for any new simulation we create.”
Your Turn: Review the images on the screen

Using our guidelines answer these questions:
  ○ Do you see any potential areas of concern?
    ■ Language: non-judgemental and empathetic
    ■ Diversity
      ● Gender
      ● Family Structure
      ● Ethnicity
      ● Culture
      ● Religion
      ● Abilities
- **Language:** non-judgemental and empathetic
- **Diversity**
  - Gender
  - Family Structure
  - Ethnicity
  - Culture
  - Religion
  - Abilities
- Language: non-judgemental and empathetic
- Diversity
  - Gender
  - Family Structure
  - Ethnicity
  - Culture
  - Religion
  - Abilities
Can I create characters in a hijab, keffiyeh, or other traditional attire?

Vyond Studio features different stock characters wearing traditional cultural clothing in the library. These characters are available in Business Friendly, Whiteboard Animation and Contemporary styles and can be found in our Casual or Office categories in the character library.

It is also possible to create a custom character in traditional attire in our Character Creator.

Male Characters

1) To start, select a headwear option in our Hair tab.
Reflection

• How could you use this framework in your area?
• Do you think these guidelines are enough?
• How would you improve on this process?
Parting Thoughts

• One of my favorite professors said to me…. 
Resources:

- Slides:
- Articles
- Contact info:
  - Amy.pate@asu.edu
  - @pate_al (Twitter)
  - [https://links.asu.edu/TICBlog](https://links.asu.edu/TICBlog)