

# Inspired by a waiata to teach the chordata

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Stand up please

Repeat after me  
please

# Congratulations

- You have now learned the key characteristics of the Phylum Chordata

# My goal today

- Show why I developed these methods
- What provided the inspiration
- Provide evidence of effectiveness (or not)

# The inspiration: Te Wānanga o Aotearoa

- A tertiary institute guided by Māori principles
- Range of courses offered
- Student centred, aimed at overcoming educational barriers
- Concurrent with beginning my own teaching

# Ma te kahukura

- 

Rere tōtika rere pai x 3  
Rere runga rawa rā e

Mā te kahukura ka rere te manu – Mā ngā huruhuru nei  
Ka rere koe – rere runga rawa e  
Ka tae atu koe ki te taumata  
Whakatau mai rā e

Mau ana taku aroha  
Whai ake i ngā whetu  
Rere tōtika rere pai  
Rere runga rawa rā e

# Stage 1 SBS “indoctrination”

- Seek diversity in instruction methods
- Be student centred
- Also Rachel Fewster

# Foundation Biology

- Bridging course
- Targets students with potential but not entrance
- Diverse class (ability, age, ethnicity, backgrounds , preparedness)
- Our teaching “lab”

# The need

- Noted I needed to change ways
- Fatigue
- Developed Cell biology & Zoology hand actions and “interpretative dances”

# Central Dogma of Molecular Biology

- Put your arm up please

# Dogma dance



# Survey Qn's

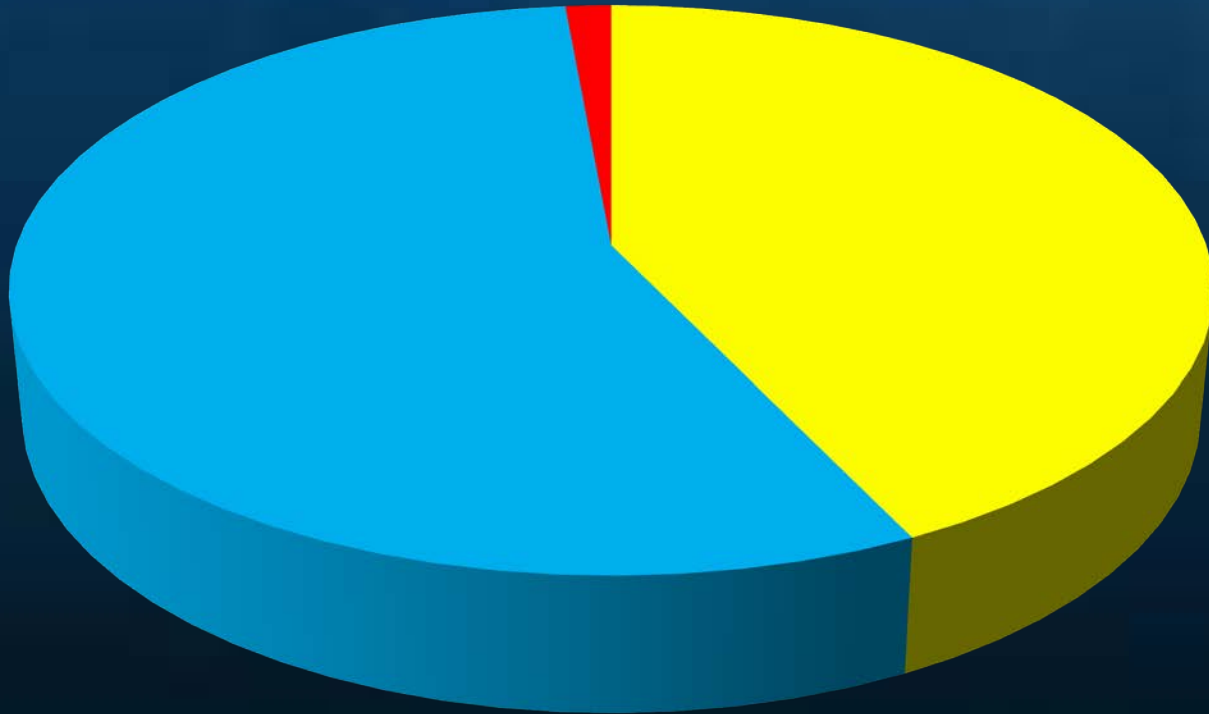
1. *I found the use of hand actions/dance assisted me with learning the Cell biology content*
2. *I used the concepts to help me memorise the concepts at a later date*
3. *I feel that the 'hands on' teaching technique had a positive impacts on my final grade*
4. *I would like to see more of this type of teaching method used in my other courses*

# Sex

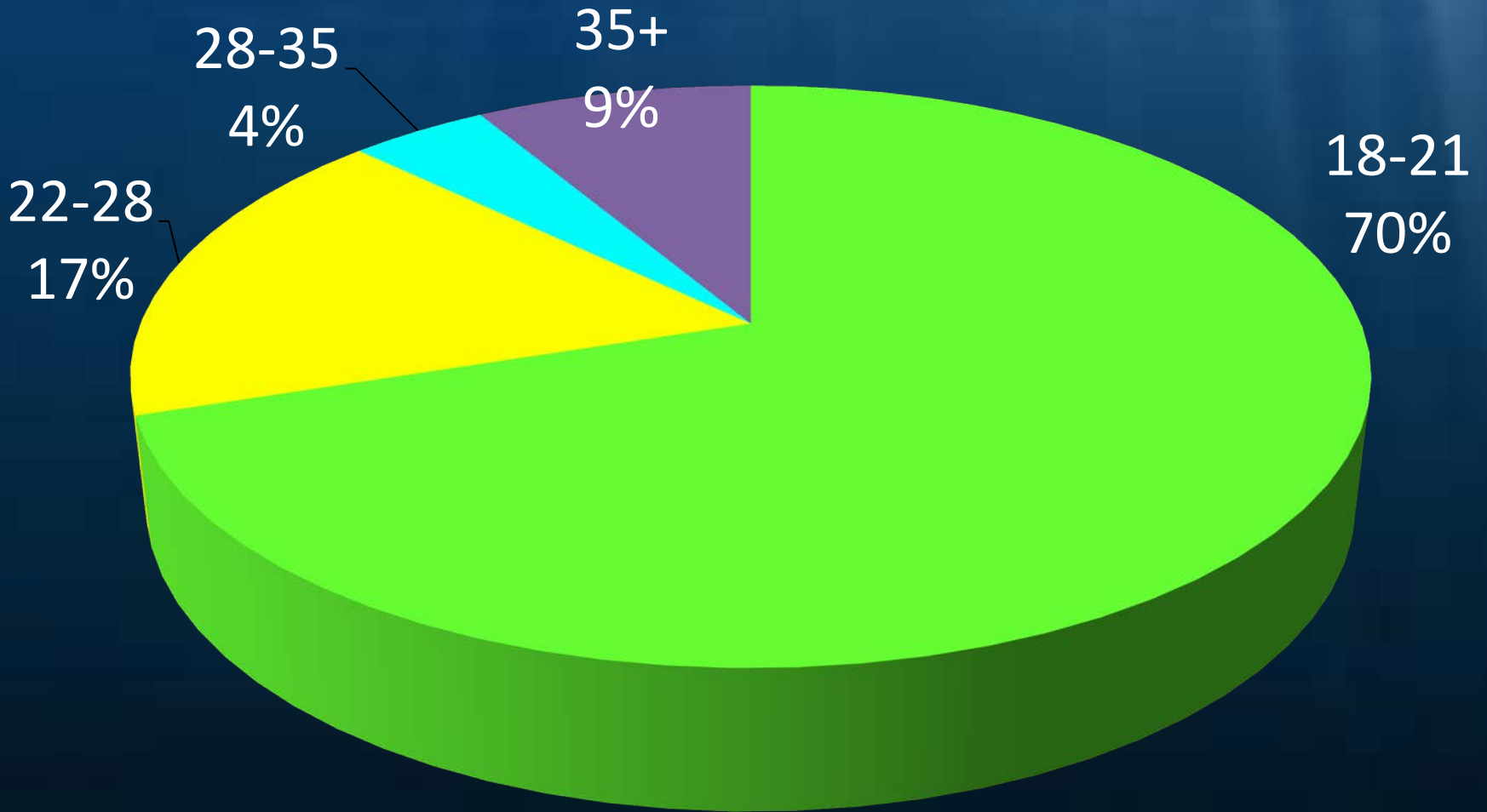
Yes please  
1%

Male  
43%

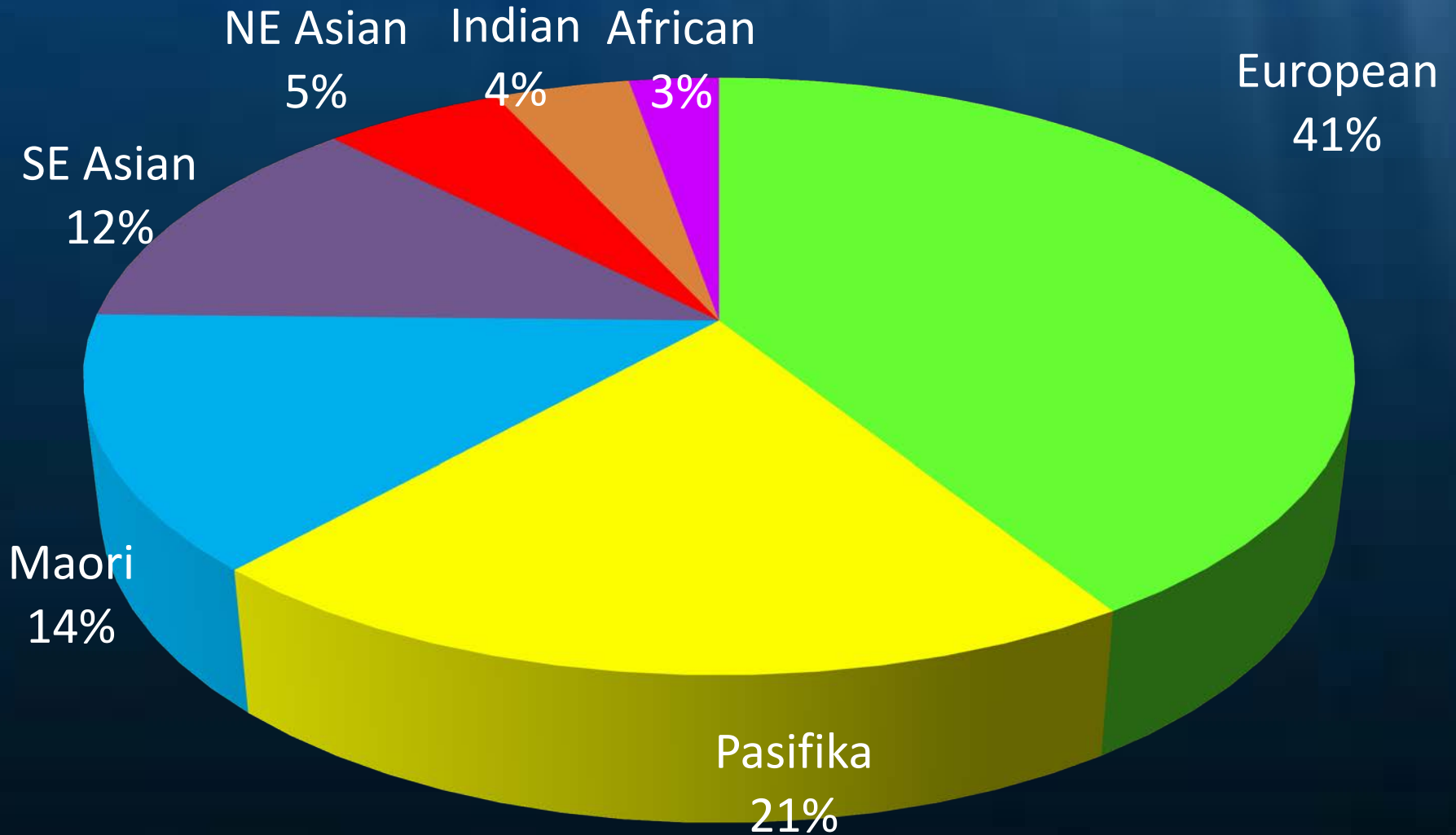
Female  
56%



# Age



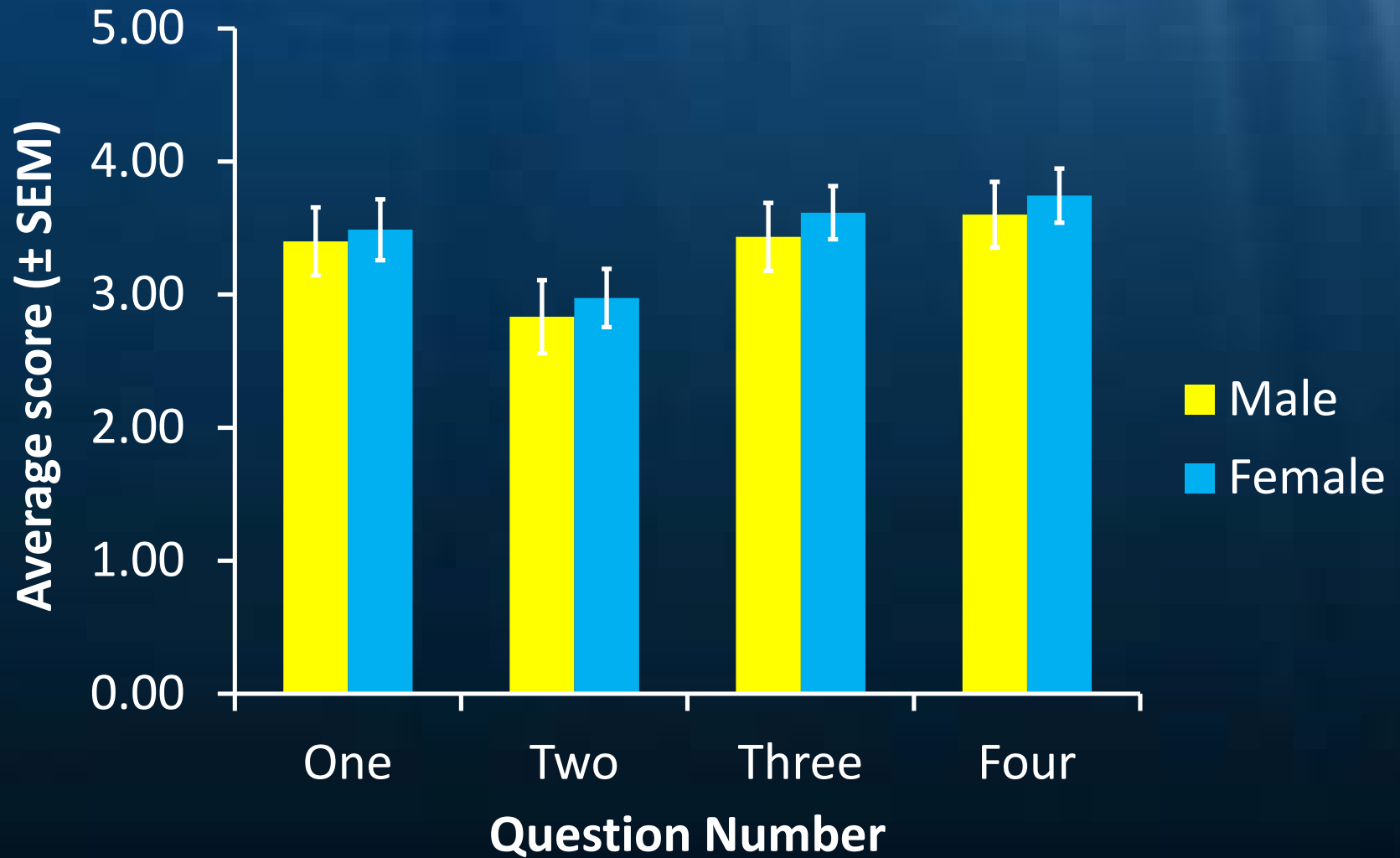
# Ethnicity



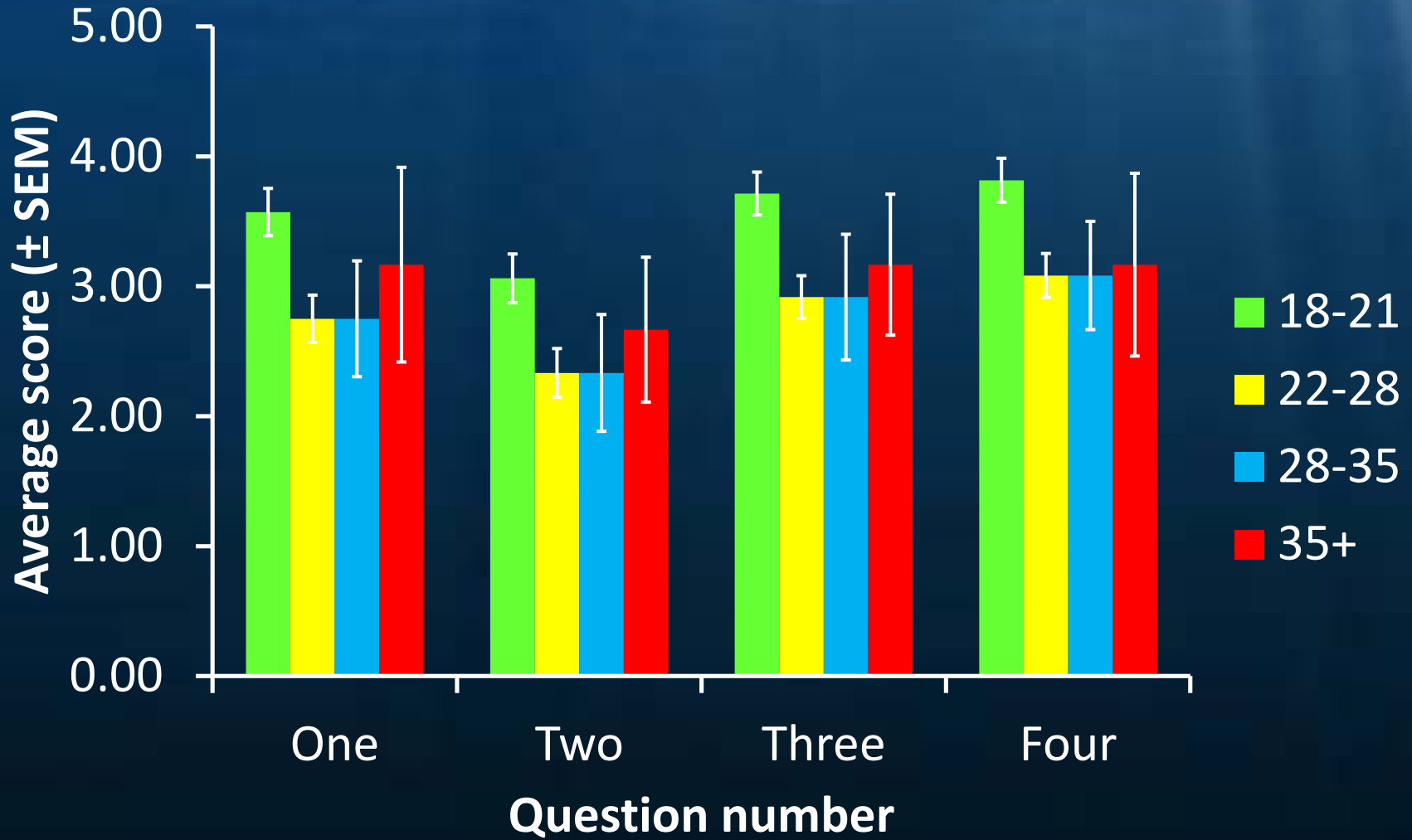
# How scores were calculated

- Options of: 0 1 2 3 4 5  
*(strongly disagree) – (strongly agree)*
- Took average response score for each sex, age, ethnicity

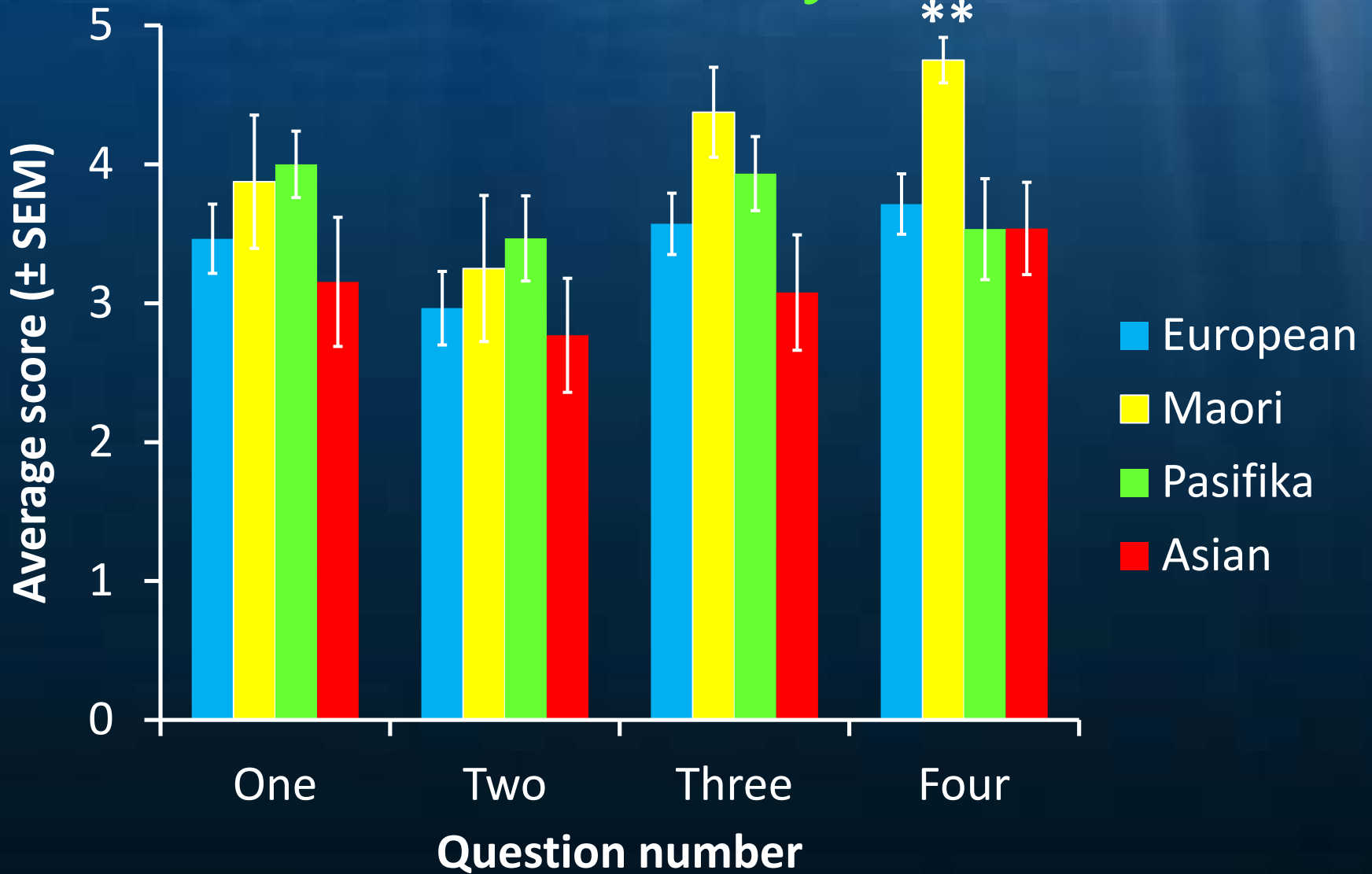
# Sex results



# Age results



# Ethnicity



# Surreptitious success

- In general student's responses indifferent
- But.....

# Stage 1 Comparative Animal Biology

- 8 am lecture
- Personal teaching evaluation - 50% (29/58 responses) of open ended feedback specifically mentioned these techniques
- All positive
- Will continue to use

# Example comments

- “Dance worked better than hand actions”
- “Hand actions too similar”
- “Please encourage all biology lecturers to use these because biology is another language and these methods work!”
- “Actions too similar to differentiate the individual steps”
- “Keep up the good work bro”
- “I had a good laugh thanx - but it just didn't work for me”

Comments/similar methods?