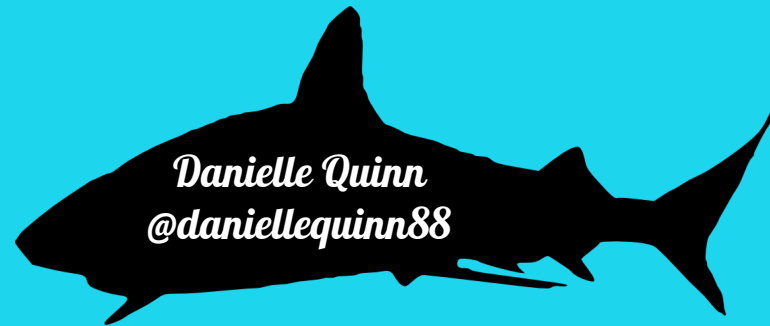
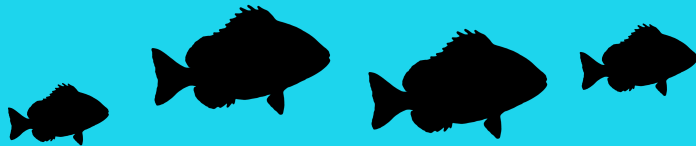


# R @ SEA:

## A CARPENTRY-INSPIRED WORKSHOP FOR IMMERSIVE LEARNING ON



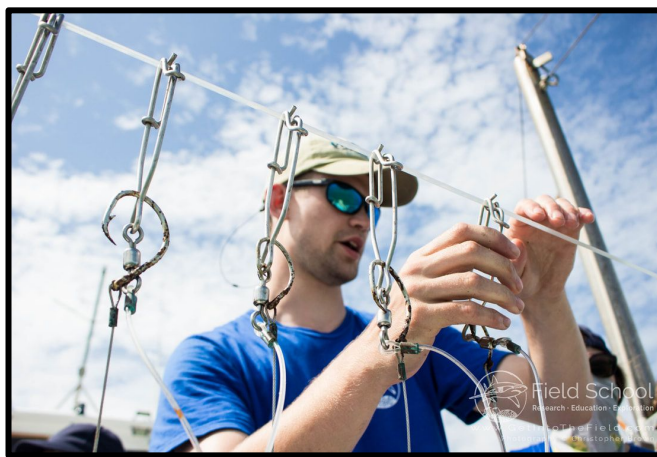
## & UNDER THE WATER



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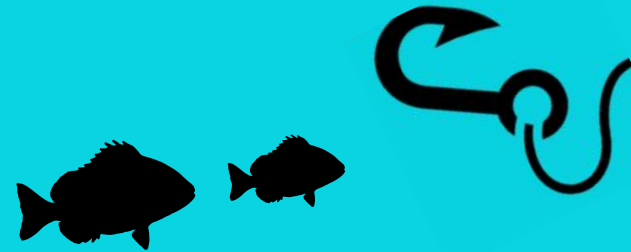
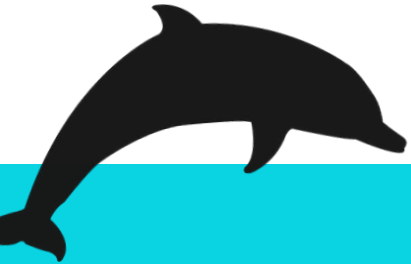
PRACTICAL RESEARCH SKILLS &  
HANDS-ON TRAINING







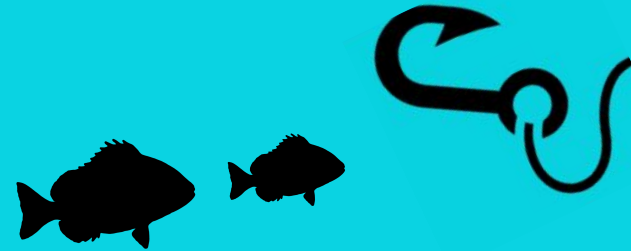
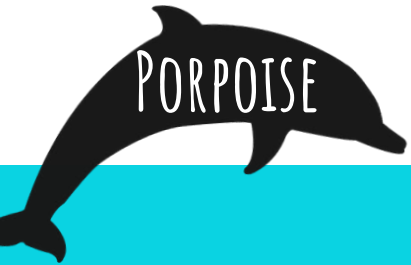
# WHY TEACH R @ SEA?





# WHY TEACH R @ SEA?

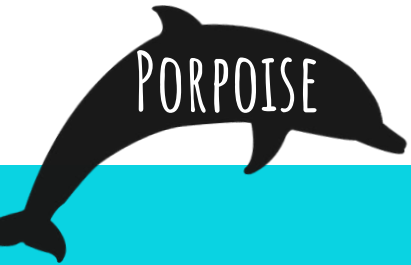
TO EMPHASIZE THE ROLE & IMPORTANCE OF  
CODING & STATISTICS IN RESEARCH SKILLS





# WHY TEACH R @ SEA?

TO EMPHASIZE THE ROLE & IMPORTANCE OF  
CODING & STATISTICS IN RESEARCH SKILLS

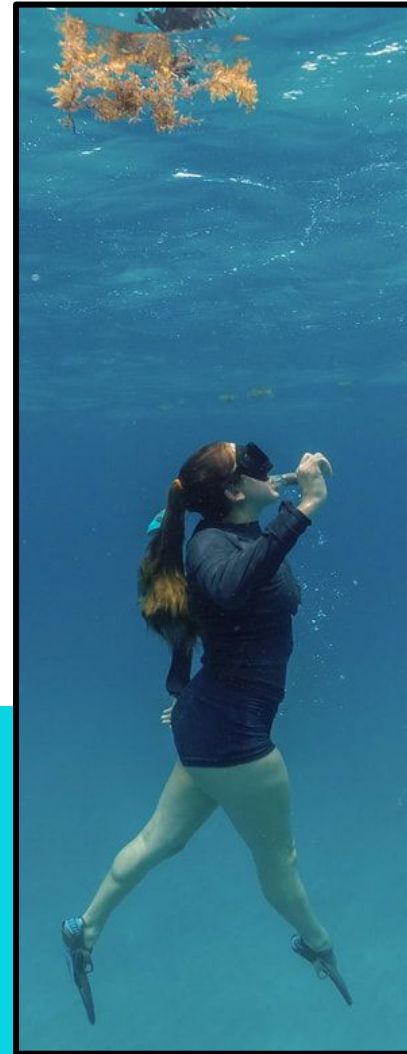
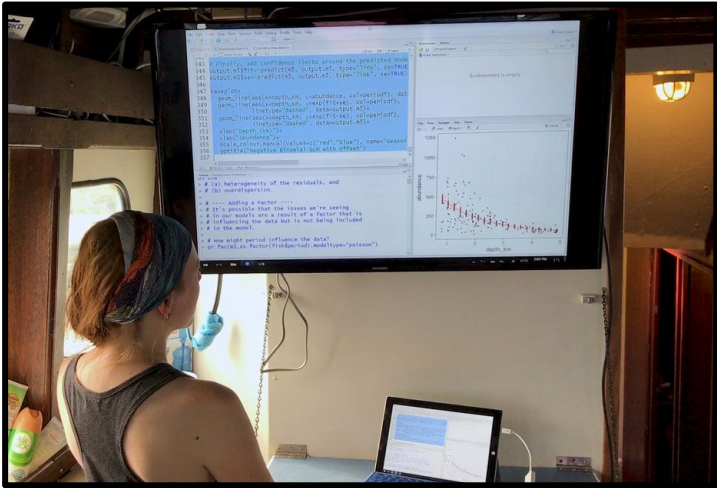


A NOVEL TWIST ON TRADITIONAL CODING COURSES

THE HOOK



# LEARNERS ROTATE BETWEEN INTENSIVE CODING & IMMERSIVE ADVENTURE



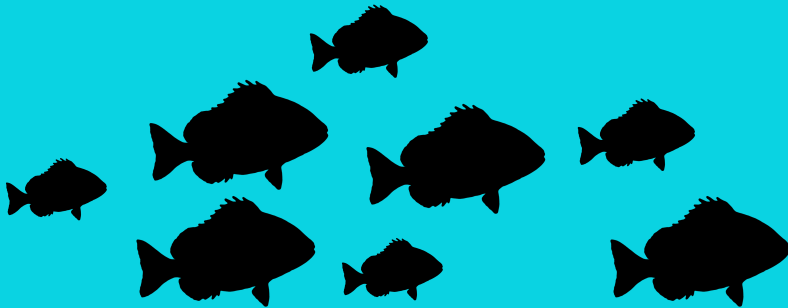
# LESSONS LEARNED: GREEN STICKIES



NON-TRADITIONAL LEARNING SPACES CAN WORK...

...BUT STICKY NOTES ARE MORE IMPORTANT THAN EVER...

... SO IS PAIR PROGRAMMING.





# LESSONS LEARNED: GREEN STICKIES

STATISTICS + CODING = COGNITIVE (OVER)LOAD

FILL-IN-THE-BLANK CODING  
TEMPLATE HELPED LEARNERS

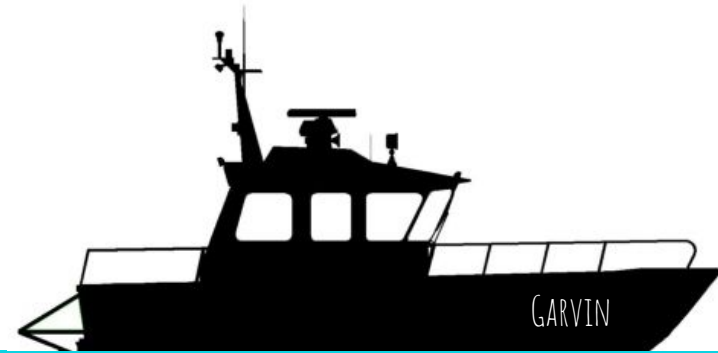
RECOGNIZE PATTERNS IN  
MODELLING PROCESSES.

```
MixedModels_Blank.R
26
27 # ---- Linear Model: Diagnostics ----
28 ## Diagnostics 1: Residuals vs Fitted values
29 # Create data frame of residuals and fitted values
30
31 # Visualize fitted values vs residuals
32
33 ## Diagnostics 2: Dispersion
34
35 # ---- Adding a Factor ----
36 # Add a column treating beach as a factor (fBeach)
37
38 # Plot the model residuals by beach
39
40 # what do we see? what does this tell us?
41
```

# LESSONS LEARNED: GREEN STICKIES

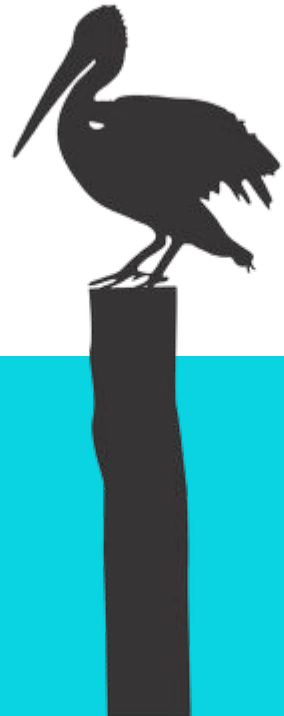
CASUAL EVENING SESSIONS WORK  
INCREDIBLY WELL WHEN

EVERYONE IS IN THE SAME BOAT...



# LESSONS LEARNED: GREEN STICKIES

"EVERYTHING ELSE"  
IS WHAT STUDENTS  
COME FOR; "HOW  
TO CODE" IS WHAT  
THEY TAKE AWAY.



# LESSONS LEARNED: RED STICKIES

DEFINE MODELLING EXPECTATIONS.

ALLOCATE MORE TIME FOR COWORKING SESSIONS.

THE INTERNET IS A LUXURY; BE PREPARED TO GO WITHOUT.

THE SUN DRAINS ENERGY.

BRING GRAVOL.

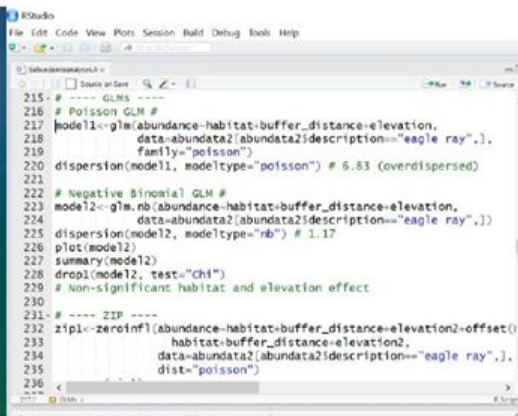
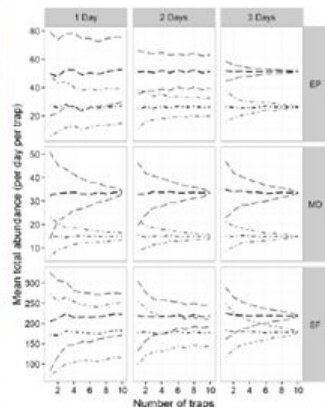




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