



Welcome May 2021!

Makers Apprenticeships



What do we do tomorrow?

How do we access the materials?

What's in the curriculum?

How should we behave?

Who are they?

Who are you?

???

What's our daily routine?

How will we communicate?

What happens on placement?

What are my responsibilities?

How do we get support?

How will we be assessed?



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<i>Time</i>	<i>Coach</i>	<i>Activity</i>
10:00	Eddie	Welcome to Makers!
10:45		Short Break
11:00	Dana	Emotional Intelligence training at Makers
12:30		Lunch
13:30	Dana	Meditation
14:00	Carina	Your placement journey
14:45		Short Break
15:00	Eddie	Succeeding at Makers
17:00		The end



Welcome to Makers!
Nice to meet you :)



Your bootcamp journey...

12 weeks of technical and
non-technical training



Your bootcamp journey...

Weeks 1 - 2: Basic programming

Weeks 3 - 4: How to build things well

Weeks 5 - 6: Database backed web apps

Weeks 7 - 8: Learning new langs + teamwork

Weeks 9 - 12: Engineering projects



Introductions...



1. Before Makers
2. Experience of programming
3. What's your goal for the next 12 weeks?



Learning and succeeding at Makers



The bootcamp in a bit more detail

The bootcamp - phase I

Module 1:
Dev tools

Module 2:
Procedural
programming in Ruby

- Work solo, but help each other :)
- Build your cohort culture
- Learn the theory of self-directed learning
- Practice reflection and self assessment
- Short coach-led sessions

The bootcamp - phase II

Module 3:
Test driven
development

Module 4:
Object Oriented
Design

Module 5:
Build a web
application

Module 6:
Build a database
backed web
application

- Mornings
 - Practice self-directed learning
 - 1-2 technical workshops per week
- Afternoons
 - Pair-programming in the afternoons

The bootcamp – Phase III

Module 7:
Teamwork

Module 8:
Learn a new
lang

Module 9:
Teamwork:
Build Acebook!

Module 10:
Teamwork:
Build anything
you want!

- No workshops in modules 7, 9 and 10
- Each team sets their own agenda
- Learn and apply Agile (and waterfall)



What does success look like?



Course goals...



Standards...



And beyond that..?

*Discipline
Confidence*

Asking questions

Planning your learning

Curiosity

Self awareness

Problem solving

Growth mindset / Accepting failure as part of the process

Practicing

Teamwork / collaboration / knowledge sharing

Independence

Seeking challenge

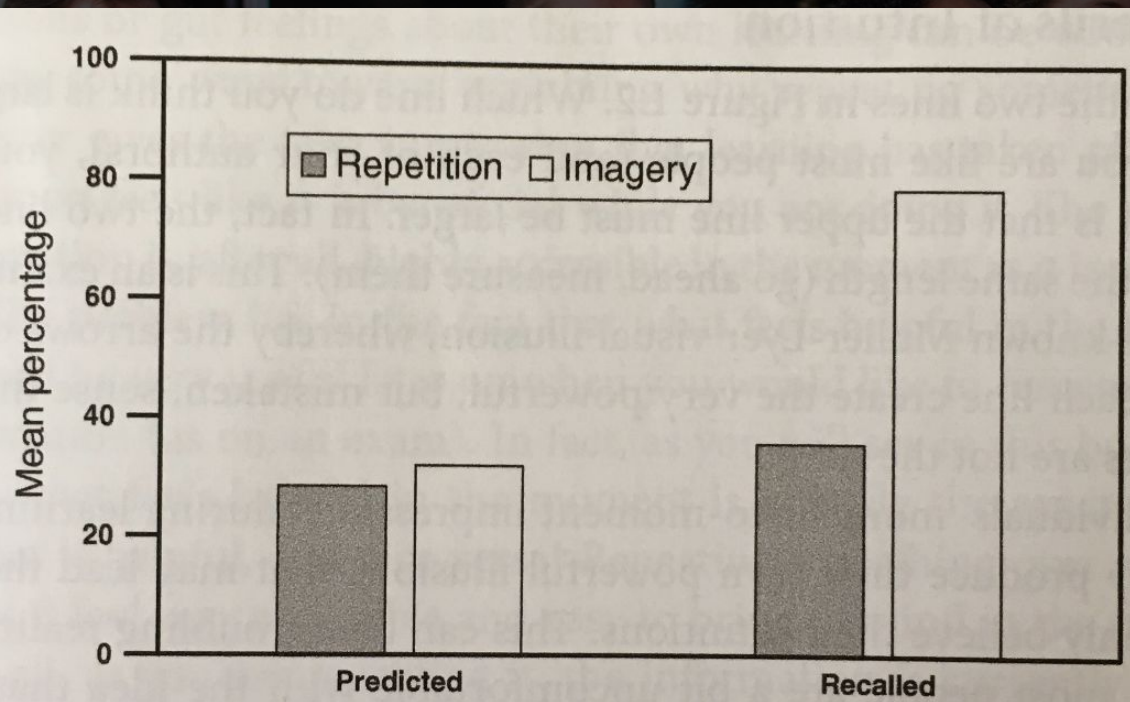
Mastery mentality



How does learning happen?
Intuition -> Evidence -> Makers



Survey results!

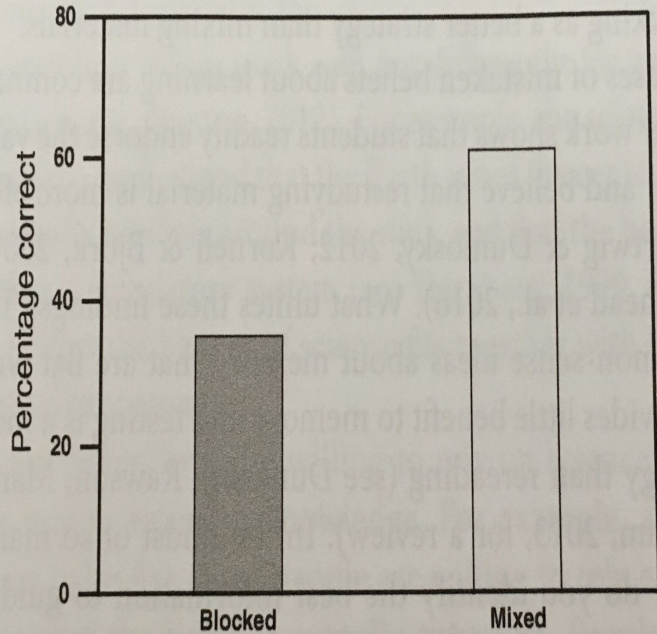


12/14 agree that:

New memories
form through
frequent repetition.



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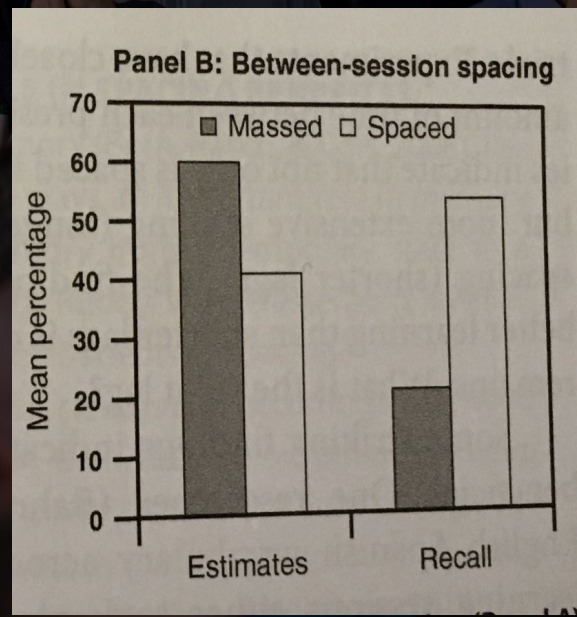
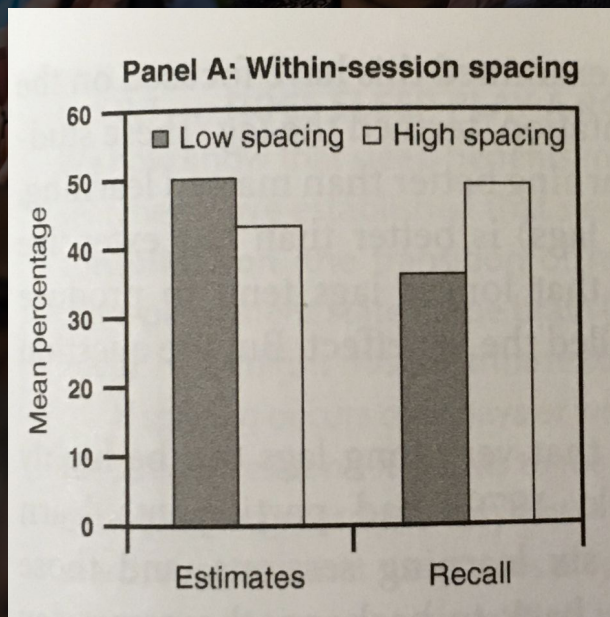
If you were studying two artists and wanted to learn about their individual style, would you study:

- one, then the other? (**blocking**)
- both at the same time? (**interleaving**)

5/14 opted for interleaving

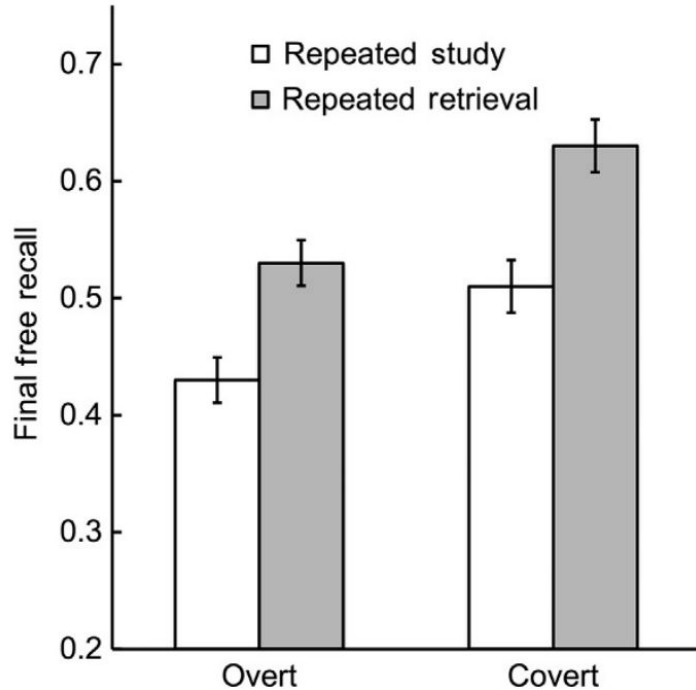
12/14 agree that:

One should **do a task soon** after the material is covered in class.





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3/14 agree that:

Re-reading is a more effective than testing as a strategy for memorisation.



Deep processing
Interleaving
Spacing effect
Testing effect



In light of that...
What do we now think about learning?



7/14 believe that:

When you're studying well and learning effectively, it feels...
easy / comfortable



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What's different about learning at Makers, compared to a typical school or university?



Here at Makers...
You'll learn skills and apply them
You're aiming future-proof yourselves

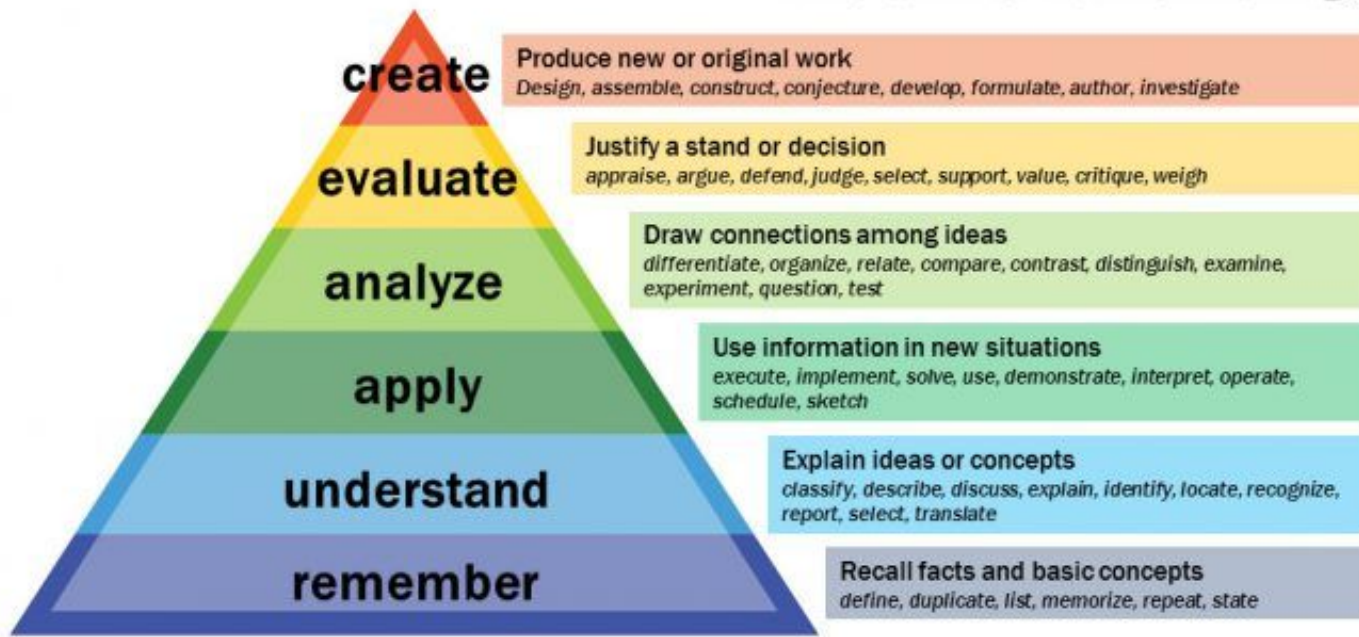


How does one future-proof themselves?

Self directed learning!

1. Reflect and choose a goal
2. Pick a task that addresses that goal
3. Do the task
4. Gather evidence to self assess

Bloom's Taxonomy





Accessing support

Sources of support

- Coaching hours PM (UK)
- Code reviews
- Supporting each other
 - Pairs
 - Peers
 - Cohort
 - Beyond – #help_wanted



*What can you expect from
coaches?*



*What **could** a coach do?*



We could tell you the answer



We could fix it for you



*We could guide you towards
the solution*



*We could guide you to reflect
on how you got stuck*



*You'll probably want different
things at different times.*

So will we ;)



The first question we might ask is
***“Have you followed the
escalation process?”***



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1. If you're stuck on a bug, follow the process in the **debugging** 💊
2. Come up with a **clear description** of the problem you're having. "It's broken" is not a problem description. To help you produce a clear description:
 - a. **Make a list** of words that feel related to the problem.
 - b. **Gather information** from any errors you're getting.
3. **Ask your pair partner.** Bounce ideas off them, discuss, and rubber-duck debug. Imagine you are seeing the problem for the first time. Talk them through your mental model.
4. **Google.** Research the problem using the description you created in step 1.
5. **Diagram.** Draw boxes and arrows, or whatever you like. Get ideas out of your head and onto paper. This makes it be easier to manipulate, examine and generate ideas.
6. **Ask your cohort.** Remember everyone is on the same learning journey it's likely they are wrestling with similar issues. Send your question to your cohort channel :)
7. **Ask a coach.** If all else fails, get some 1-1 help from a coach. This help may come in the form of more questions!



Why does this process exist?



Maintaining a supportive environment

<https://makers.tech/code-of-conduct/>



Our code of conduct



Be friendly and patient. Be welcoming.

We strive to be a community that **welcomes** and **supports** people of **all backgrounds and identities**.

This includes, but is not limited to members of any race, ethnicity, culture, national origin, colour, immigration status, social and economic class, educational level, sex, sexual orientation, gender identity and expression, age, size, family status, political belief, religion, mental and physical ability and criminal convictions.



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Be considerate.

Your work will be used by other people, and you in turn will depend on the work of others. **Any decision you take will affect users and colleagues**, and you should take those consequences into account when making decisions. Remember that we're a worldwide community, so you might not be **communicating** in someone else's primary **language**.



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Be respectful.

Not all of us will agree all the time, but disagreement is no excuse for poor behaviour and poor manners. We might all experience some frustration now and then, but we cannot allow that frustration to turn into a personal attack. It's important to remember that a community where people feel uncomfortable or threatened is not a productive one.



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Be careful in the words that we choose.

We are a community of professionals, and we conduct ourselves professionally. **Be kind** to others. Do not insult or put down other participants. Harassment and other exclusionary behaviour aren't acceptable.



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Try to understand why we disagree.

Disagreements, both social and technical, happen all the time. It is important that we resolve disagreements and differing views constructively. Remember that we're different. The strength of our community comes from its diversity, people from a wide range of backgrounds. Different people have different perspectives on issues. Being unable to understand why someone holds a viewpoint doesn't mean that they're wrong. Don't forget that it is human to err and blaming each other doesn't get us anywhere. Instead, focus on helping to resolve issues and learning from mistakes.

Admin and reporting

- Bud – *what you've done*
- Jibble – *when you did it*
- End of unit reflections – *how you've progressed*

Please Jibble-in, now.



A closer look at phase I
– aka ReadyUp!

- Command line
 - Understand and use basic commands
- Git
 - Understand the problem it solves
 - Understand and use basic commands



ReadyUp

- Mastery curriculum and quizzes
 - Basic Ruby syntax
 - Problem decomposition
 - Debugging



ReadyUp

- Tracking your own progress
 - Experiment with different approaches
 - Compare approaches with your peers
 - Pick one to continue with