

Instructor Playbook

The ultimate guide to rock your instructor experience at GOMYCODE

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Dear Instructor,

You are joining the most compelling edtech startup in the region. We are very happy that you are joining our hand selected instructor team in this journey. You have gone through a very selective recruiting process and you made it to the end. Congratulations!

Together we are building the most scalable and efficient educational platform that will help our people acquire the most in-demand skills. We train top talent on the newest skills and connect them with opportunities around the world. Our model, our environment and our community leave lasting impressions and positively impact our students lives.

Together, we are solving one of the biggest problems of our times: upskilling and reskilling people on digital skills. We are making it possible for people to join the 21st century economy and to live fulfilling lives.

You will be part of this journey and your contribution will be very valuable.

The founders

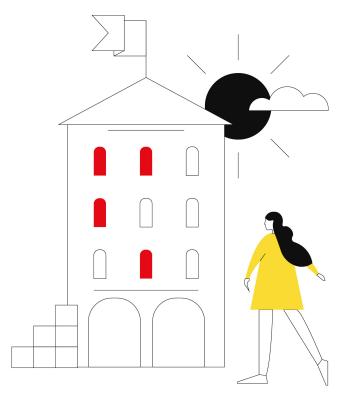
Methodology & instructor role



Methodology (1/2)

Welcome to the most compelling and engaging learning experience that exists.

We are excited to have you with us in this journey. We will help you learn new skills and enjoy every second you spend at GOMYCODE.



The GOMYCODE learning model is unique and different.

The fundamental idea behind our learning model is to push students to develop their self learning skills, to work on projects and learn how to build, design and ship a tech product. This change of model is very hard. You see, since growing in a traditional education system, we have been taught in a passive way, where the teacher is the only source of knowledge. Knowledge gets passed from one to another in a passive way.

Today we live in a very dynamic and changing world.

The student's most valuable resource is not information itself; it's rather the student's own capacity to learn something new, to think independently and be socially strong. Our model reflects the work that happens in the workplace and real life.

"Tell me and I forget, teach me and I may remember, involve me and I learn."

Benjamin Franklin, Founding Father of the United States of America

"You can't teach people everything they need to know. The best you can do is position them where they can find what they need to know when they need to know it."

Seymour Papert, Computer Scientist and Educator and MIT

"Change is the end result of all true learning."

Leo Buscaglia, Motivational speaker and professor at USC

Methodology (2/2)

You will find below fundamental ideas that you need to pass to students to understand the why of our model:

New Learning Methods

21st-century skills cannot be learned using old instruction methods that were designed to develop skills important of the 19th century.

We need to move to active learning in order to learn and practice today's in-demand skills.

19th Century: Passive Learning

When the education system was designed, access to knowledge was limited.

Knowledge was passed down from person to another, resulting in the hierarchy we know today. Learning was passive.

New Skills Demanded

As the economy and labor demands changes, businesses are more and more tech based, jobs are shifting and requiring higher and more advanced skills level than what used to exist 200 years ago (imagine life without Google or YouTube).

21st century: Active Learning

Today, access to knowledge has exponentially changed. Evaluating and applying new knowledge has become important, as has collaboration and group work. We've re-designed the education model using active learning to develop skills workers need.

Instructor role

Your job as an instructor is to make the learning experience positively social, human and more interactive.

Instructors inspires, motivates and gives the best example to students.

The instructor role

- Creates fun, dynamic and interactive learning environment in which students experience educational success and personal satisfaction
- Instructor is not the focal point as in traditional education
- Instructor is a facilitator and students are the protagonists -> The instructor is here to facilitate their learning and motivate them
- The instructor is the Orchestrator of the Hackerspace atmosphere
- How to assess the atmosphere of the forum:
 - Are the students respectively: Laughing/moving around/talking a lot/speaking or looking serious/sitting in one place/silent/taking notes?
 - o Is the instructor respectively: smiling/sitting by the students/listening to students/inviting students to help each other or looking serious/standing up/constantly talking/ constantly trying to help students by himself?

If I attend a yoga class, I want to learn the correct technique. But, I also want to enjoy the class. I prefer some classes to others usually for one reason — the teacher. If the teacher is engaging then those in the class are engaged and enjoy the experience. And these classes are more popular and well attended.

The instructor is also the Guild Master

The GOMYCODE's program uses the **guild** model to encourage students to work together and share their knowledge and resources.

Guilds originates from video games (students are pretty much the <u>anti-Leeroy Jenkins</u>). For those of you less familiar with the concept, it essentially enables gamers to play together in order to avoid immediate death. Well, we found this to be highly relevant for our students.



GMC vs Traditional

We value active learning over passive learning

	Instructor	Hackerspace Atmosphere	Learning Approach
GMC	Facilitator.Verifier.Motivator.	 Student focused. High student involvement time. active interaction with students Movement / fun / dynamic / empowering. 	 Focus on practices and building real life products. Focus on self study as in real life.
Traditional	Provider of knowledge.Examiner. Disciplinarian.	Teacher-focused.High teacher talking time.Limited student interaction.Static.	focus on theoretical knowledge.No real life projects.

Instructor principles



We are obsessed with Student Success

We develop our students by giving them the opportunity to develop themselves, surrounding them with stunning instructors and giving them big challenges to work on.

Mediocre instructors or unchallenging work is what kills progress of a person's skills.



Imagine if every instructor at GOMYCODE is someone you respect and learn from ...

At GOMYCODE, we particularly value the following five skills in our instructors:

- 1. Student Focused
- 2. Strong organization
- 3. Setting high expectations
- 4. Spirit of inquiry
- 5. Self reflection

Meaning we only hire and promote instructors demonstrating these skills.



- You are here to motivate students and make them love technology. Don't judge students, only support them and help them achieve their goals. Help them believe in themselves. You care intensely about their success. Students want a great human experience before everything so make it happen for them. Ice breaking activities hype/ excite the students about the experience and motivate them to continue.
- You should consistently demonstrate strong presence and interactivity so your students can rely on you. That means <u>consistently being present</u> near students answering their questions and helping them progress.
- You listen well first, instead of reacting fast, so you can better understand. <u>Stand Up</u> <u>meetings</u> is the best way to listen to everyone. Make sure students are progressing and look for different ways to explain a concept so every student can understand (everyone learns differently).
- You treat people with respect independently of their status or agreement/disagreement with you . You maintain calm poise in stressful situations and never get into conflicts with students.
- You are expected to dress in casual attire, to be well-groomed and wear clean clothing, free of holes, tears, or other signs of wear.

 Clothing with offensive or inappropriate designs or stamps are not allowed.

06 A good instructor instills confidence

- Many students do not believe that their teachers actually believe in them
- Many students do not believe that their parents actually believe in them
- Many students do not believe that any adult actually believes in them
- Many students, therefore, do not believe in themselves
- Students who do not believe in themselves tend to have more behavioral and learning problems
- if you want a student to believe in himself, "then actually tell him that you believe in him, that you will not give up on him, that you understand his struggles, and that you are there for him. Far too many teachers forget to do this -- to tell and show their students they actually believe in them." Among the many research-driven discussions of pedagogy and teaching strategies, it can be easy to forget the power of simply reassuring and encouraging your students verbally to instill confidence in their abilities.

08 Make learning goal-oriented

If you set defined goals with your students -at the beginning of the session or even of each lesson- the whole guild will have a better understanding of its individual and collective accomplishments. To make learning more goal-oriented, make decisive statements about the day's learning goals. For example, start a lesson with a statement such as "today you will learn the first step of web functioning," and finish the class by saying, "Congratulations! Now you're ready to explain to your friends how the web works" Cultivating this perspective helps students take confidence from their own progress, boosting their motivation and confidence.

2. Strong organization and preparation (1/2)

An instructor can be knowledgeable, prepared -- and even a great communicator -- but still fail simply because of an inability to deal with organization.

Organization encompasses all the strategies an instructor deploys to organize and arrange students, learning materials, space, and use of session time to maximize the efficiency of instruction and learning.

This helps students enjoy an organized, structured environment with an emphasis on a positive educational atmosphere that is conducive to learning.

You establish routines: cultivate a positive and organised learning environment.

Establish a routine and system wherever necessary for your daily tasks and requirements -- from the general to the specific.

For example, if a student becomes stuck on an assignment, outline clear, instructor-approved guidelines for seeking help in a timely way (e.g., asking peers for assistance and -- if still unsolved -- seeking the teacher's help).

Stand up meetings is a fundamental routine to organize the session and accomplish learning objectives

You accomplish amazing work by correcting all checkpoints, doing all one-to-one meetings and workshops on time.

2. Strong organization and - preparation (2/2)

Instructors' skills

A good instructor is prepared.

Every day, the effective instructor comes to GOMYCODE prepared to make impact.

Organizing time and preparing materials of instruction in advance are among the most important aspects of effective instruction.

- Do the reading and problem sets.
- Take notes on the material.
- Review lecture notes for the week.
- Prepare an outline of issues to cover in class.
- Make a list of questions to use in class or write on the board.
- Make a handout of topics to discuss in class.
- Make a study guide to hand out.
- Design a homework assignment or question for students to prepare for a future class.
- Compile bibliographies or other outside information related to the material.
- Assemble visual material.

- Prepare supplemental reading.
- Prepare handouts on writing tips, research methods, problem solving, lab techniques, etc.
- Meet with the professor and/or other TFs to discuss the material and how to present it in section.
- Review students' questions to anticipate their concerns, problems, interests.
- Make up quizzes.
- Devise debates, small group discussion, or other interactive projects.
- Copy articles relevant to the discussion at hand from newspapers and other periodicals.

A good instructor sets high expectations.

Effective instructors don't set limits on their students. They have high standards, they consistently challenge students to do their best, and they are caring professionals empowering students to believe in themselves. As an instructor, you know you should always expect the best of your students and encourage them to their utmost potential. But you also know doing so on a daily basis can be incredibly challenging.

Don't praise low quality work

Praising low quality work communicates low expectations. Communicating that message can have grave consequences.

React to changes in performance.

A dramatic downturn in a student's performance represents an opportunity to send strong messages about your academic expectations.

A student whose performance has dipped may be told, "This is not the standard of work I know you're capable of. We need to find out what is happening and make a plan to get you back on track."

Such a remark from a respected instructor can be a powerful spur to a flagging student."

Note that the language around reacting to negative behaviors requires tact and subtlety; ensure that you frame the comment in a way that provokes the student to consider their own ability to do well (highlight what should be improved).

Try to get your students to consider not only that they have the ability to do well, but there is something they have done to bring about the result.

4. Spirit of inquiry

A good instructor never stops learning.

You seek to understand technology trends, new frameworks. You want to have a deep understanding of how things work and not just a superficial understanding.

You follow tech influencers, do new online courses and read tech articles and blogs and you share what you have learnt with others in physical world (workshops, live coding...) or through videos and articles (medium, youtube, go my tech, facebook live...).

- You inspire others with your thirst for excellence and knowledge.
- You are broadly knowledgeable about business, technology and education.



A good instructor practices self-reflection.

You must continually examine and evaluate their attitudes, practices, effectiveness, and accomplishments. Without reflection, you run the continual risk of making poor decisions, using bad judgment, or unquestioningly believing that students can always accurately interpret your actions as intended.

Without the tendency to assess your own abilities, you may continue to plan and instruct on the basis of unexamined assumptions -- and remain unaware of your biggest strengths and weaknesses.

Practice self-inquiry -- Posing "what and why" questions give instructors an important sense of perspective and power over their instruction style. Here some questions instructors to ask themselves:

- 1. What am I doing and why?
- **2.** How can I better meet my students' needs?
- **3.** What options are available?
- **4.** How can I encourage more involvement or learning on the part of the students?
- 5. Have I considered my own values as a professional and my comfort level acting on those values?
- 6. What conscious choice can I make to make a difference?

Do peer observation – Peer observation provides a chance for instructors to view, assess and learn from one another's instruction styles. This helps expose instructors to different instructional styles and strategies, stimulating critical reflection on their own instruction habits and methodologies. You will be surprised at how enjoyable the process is -- and how willing your colleagues are to collaborate!

Our High Performance Culture Not Right for Everyone

- Many instructors love our culture, and stay a long time.
 They thrive on excellence and on having lasting impressions on our students lives. They usually become super stars in their domains inside or outside GOMYCODE
- Some instructors, however, value job easiness over impact, and don't like our culture. They feel fearful at GOMYCODE.
- We're getting better at attracting only the former, and helping the latter realize we are not right for them.



Instructors in action



- Break the ice: know each other first: name and why come to GOMYCODE?
- When students come to GMC, we implicitly ask them to do many things. Make sure these things are clear during the first session by using the welcoming presentation. Here are the main points that you need explicit very clearly:
 - Trust our method and the GMC staff: If things are not clear don't worry. Just continue to progress, things will get much clearer later. The methodology is efficient and worked for over 10000 students.
 - Accept the method as it was designed. Use the method as it was designed
 - Be open to changing preconceived, traditional ideas about Computer Science learning
 - Become comfortable with uncertainty
 - Take risks, not to be afraid to make mistakes
 - Study at regular, constant pace
 - Plan and use available time effectively and efficiently. Time is never enough. Parkinson law: work (learning effort in our case) expands so as to fill the time available for its completion
 - We are Product oriented: you will build your products at the end of the training.
 - We do Collaborative learning: fast students help slow students. Slow students don't be shy to ask questions. We are a community. We are here to help each other.
 - o content is a commodity: our content is not enough a lot of content available on internet, you will need to look for the right content during this training but especially after the training. At GOMYCODE, you will learn to learn.
- Read the course the first session. Don't let students go through the course by themselves first time they will be bored. Show them an example of what they will be able to do at the end of the program.

Session timeline

01

We always start with a **standup meeting**: Every student tells orally (and not by sending a message on Slack) what she/he had done since last session and what is she/he planning to do during current session.

At the end of the standup meeting, we fix the objectives and planning of the session



Break the ice activity (social or learning activity)



We execute the planning discussed during the standup meeting. Without this level of organization, we cannot help students achieve their objectives.



Last 15 minutes: we assess objectives and planning achievement and we set objectives of self learning.

During the whole session, the instructor should stick with her/his students - she/he needs to be present to answer their questions and motivate them - Students don't support instructor absence even if they don't tell it directly.

Constant reinforcement of the points of last slide by all staff members will ensure that students gain correct study habits.

Instructors lead and participate in these activities. The instructor animates, gets everyone involved and breaks the ice.

What is your name?

- Each student / instructor writes 2-3" fun facts " about themselves on slips of paper.
- Mix up the pieces of paper.
- Each student takes a piece of paper at random. If the paper is his, the student gives it back, otherwise he reads it to everyone.
- The rest of the participants guess who owns the paper based on their first impression of their colleagues.

2 truths, 1 lie

- Take turns getting up and saying 3 fun / weird" "facts" about yourself, one of which is false.
- The others have to guess which one is a lie.

Mime games

- The students are divided into two teams.
- The two teams take turn and choose everytime one of their members to take a piece of paper and mimic what is written.
- The team that guesses the word first wins the point.
- The game is over when all members have spoken or when a team reaches the preset score.

Hand It In, Pass It Out

Run this short exercise to **build topic comprehension.**

It starts by posing a question with an objective answer that's explainable in a few sentences. Without writing their names down, students should answer the question on plain sheets of paper. As they hand the papers in to you, quickly distribute them back to students at random. Explain what the correct answer is, so that they can grade the paper they've received. In doing so, they'll improve their understanding of the topic.

Conclude the exercise by taking a poll to measure how many papers had the right response.

<u>Jigsaw</u>

Launch a jigsaw activity to **teach accountability to each student** while checking for understanding of a specific topic.

The method consists of dividing a task into subtasks and assigning one to each student in a small group. Group members then work to become "experts" about the information within their subtasks. For example, if the group is investigating multiplication, one group member may be in charge of learning more about the multiplication of negative integers.

Each student returns to his or her group after this investigation process, sharing new knowledge.

For assessment purposes, you can require each group to prepare a short presentation about the overarching topic you assigned.

Stop and Go

Purchasable or assignable as an art task, they're two-sided cards -- one green and one red. As you deliver a lesson, students should hold the green side toward you if they understand everything.

If something's unclear, encourage them to turn the red side forward. When you see red, stop and clarify -- or expand upon -- your points until you see green again. This should help you quickly assess if students are processing content as you deliver it.

Challenge (kahoot e.g.)

- The instructors choose a technical challenge from a predefined list.
- Students have 1 or 2 hours to solve this challenge.
- The challenge maybe: fixing a bug, reproducing an application / functionality, quizzes (Kahoot)
- You can divide the students into groups.
- A price can be given to the winner.

video game competition

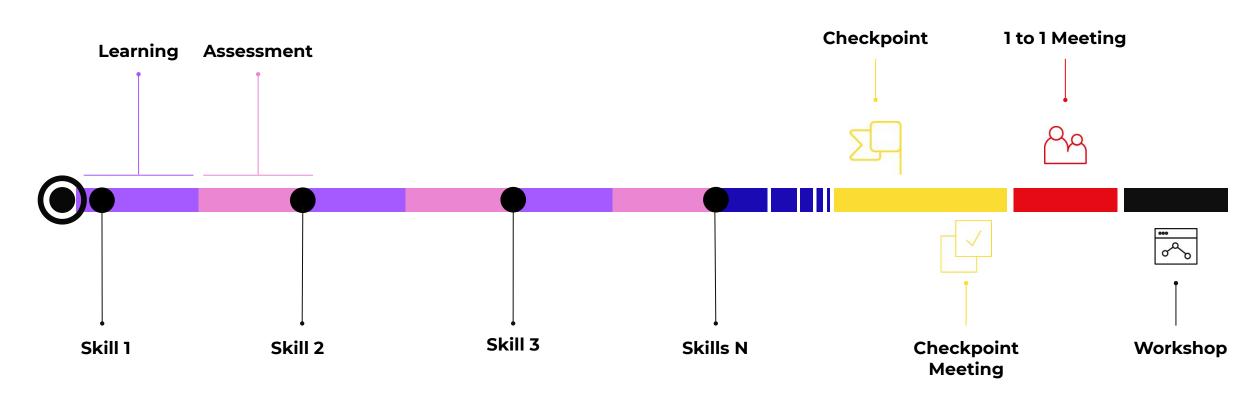
- The instructors launches a LOL / fortnite tournament ... and divides the students into groups.
- The tournament takes place according to the rules of the online game.
- Board games will be made available for those who do not like video games.

Find common points in the group

- Students need to find 1 trait that is common to all the students.
- The students stand in a circle.
- Taking turn (using a ball to throw), the students share the facts/information about themselves.
- The sharing stops when they find a common trait.
- This trait can be used to find the guild's name.

Educational instances (1/2)

Superskill cycle



Educational instances (2/2)



Skill

It's the **Core component of content**. A set of skills is a super skill. A set a super skills is a track.



Checkpoint

The project that concludes a super skill.

- The student submits her/his work
- 2. The instructor checks the checkpoints, gives feedback and rates the student's work.
- **3.** The instructor closes the checkpoint on learn.



One to One meeting

It's a **Job Interview Simulation** between the student and the instructor. The questions synthesise the self Learning part of the Super Skill.

The instructor will not explain or correct the student while doing it.

- The student should book a 1-to-1 meeting.
- 2. The student and the instructor will have a 15-min max meeting
- 3. The instructor will detect the theoretical weakness of each student and take actions during the normal session.



Workshop

It's a presentation or a live coding to explain a concept or a technique.

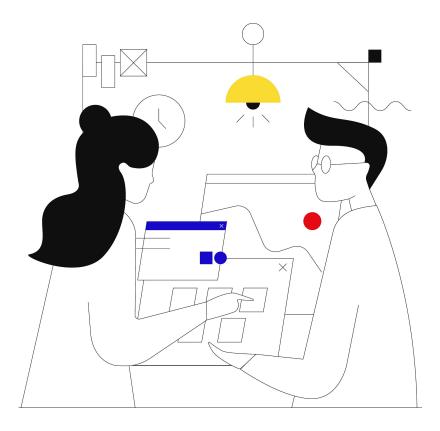
The students and instructors engage discussion and activity on a particular subject or project.

Student common concerns and how to address them (1/2)

The most student common complaints or areas of difficulty usually are the following. For each of these problems, try to find out if there is a real problem or a perceived issue: high or unrealistic expectations, or an excuse for a different issue (shyness...) but here some clues to answer:

Difficulty understanding Computer Science concepts:

- 1. Trust our method and the GMC staff: If things are not clear don't worry. Just continue to progress, things will get much clearer later. The methodology is efficient and worked for over 10000 students.
- **2.** Be open to changing preconceived, traditional ideas about Computer Science learning.
- **3.** Become comfortable with uncertainty.
- 4. Take risks, not to be afraid to make mistakes.
- 5. Speak with other students who already understand the concept.
- 5. Students come from different backgrounds and every student has her/his learning speed and style and her/his prerequisites. You understand the lacks of each student and suggest materials and resources that answer students needs.
- **7.** More 1-to-1 time with the student.



Common student concerns and how to address them (2/2)

Desire for further practice and explanations

- 1. Give additional resources for exercises and projects
- 2. Coding mastery below what they expected to achieve
- **3.** Coding mastery comes with practice: Practice more.

Lack of time

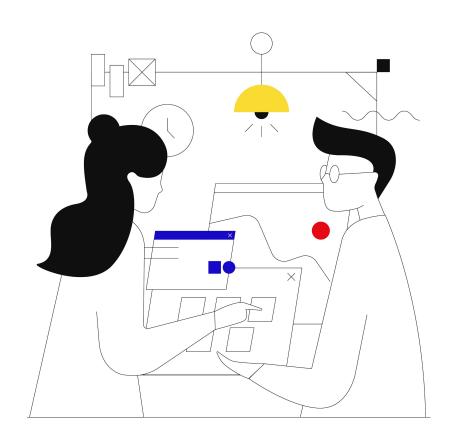
Are you using the time in an optimized manner? How can you improve your use of time? Plan and use available time effectively and efficiently. Time is never enough.

Parkinson law: work (learning effort in our case) expands so as to fill the time available for its completion

Lack of content

Content is a commodity: our content is not enough - a lot of content available on internet, you will need to look for the right content during this training but especially after the training.

At GOMYCODE, you will learn to learn.



Instruction techniques



1. Instruction techniques (1/5) Eliciting

Empower your students: You are his instructor, Google is his best friend for life!...

Students at GOMYCODE go through 3 phases during their learning

"I am new, I don't understand anything, I'm blocked - Please help!"

- Do what is right not what is easy: don't show the answer Help the student find the answer by himself.
- Guide students to find the solution by themselves: which web site? which key words?r... share with them good resources to find the right information.

"I did a lot of research - problem still unsolved."

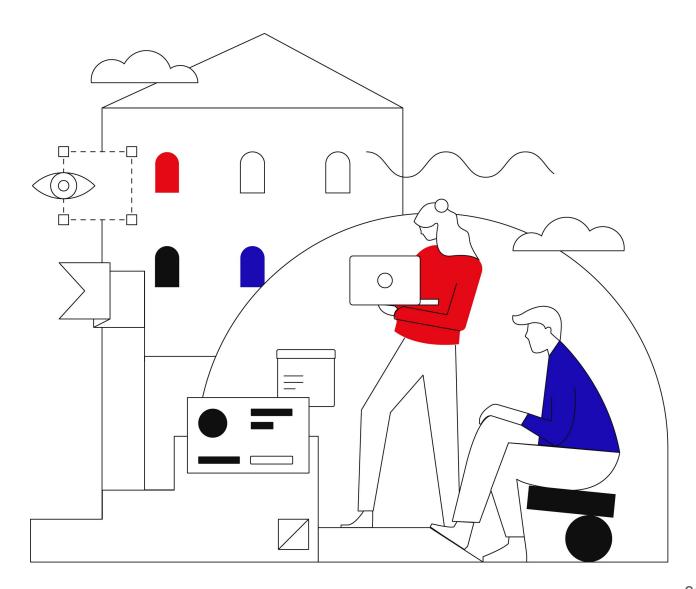
- Help the student understand the problem. What could be the problem sources?
 Draw a tree with all the possible problem sources and start eliminating not relevant sources.
- Never give the answer. Guide them to find the answer/solution by themselves.
- At this level, you can discuss other solutions and answers with the student

Encourage students to take risks and make errors - this will help them build confidence and it will boost their motivation

- If we don't elicit students become more dependant on the teacher for answers and miss opportunities to become more involved and independent learners.
- Eliciting techniques contribute to creating a fun and interactive student centered learning environment in which opportunities to practice coding is maximised.

2. Instruction techniques (2/5)

Example isn't another way of teaching, it's the only way.



3. Instruction techniques (3/5)

Concept questions:

Concept questions involve asking questions to ensure the student has understood the function or meaning of a coding concept and not just applying a structure because of mechanical learning:

- Concept questions empower students by making them aware that they understand the meaning of the coding concept.
- Concept questions are useful after the (workshops, checkpoints validation, one&one's).
- When students perform poorly in the (workshops, checkpoints validation, one&one's), it is often because they don't have a clear vision about the function or the coding concept.

Tips to construct concept questions:

Yes/no questions, either/or and simple WH questions are effective.

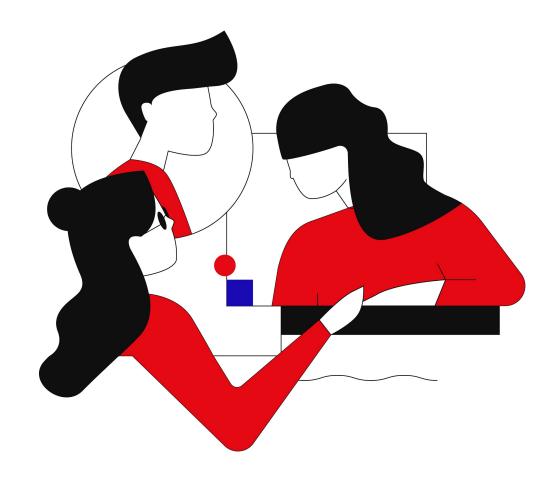
At the end of the fullstack track, many students don't understand the difference between the internet and the web.

Concept questions at the end of each workshop can help solve this problem.

4. Instruction techniques (4/5)

Correction techniques:

- Correction techniques contribute to making a class student centered and if applied correctly can empower students.
- Over-correction causes anxiety and a sense of failure.
 Prefer self and peer correction.
- When to correct students:
 - Self learning: low correction
 - One&one, checkpoints, workshops: high correction
 - o Project review: tips, best practices...
- Use correction techniques that maximise student involvement:
 - Facial: widening eyes, looking confused, looking bored...
 - Physical: shaking head, covering ears...
 - Intonation: repeat the the mistake with intonation of surprise
 - Verbal: not exactly, sorry, almost....

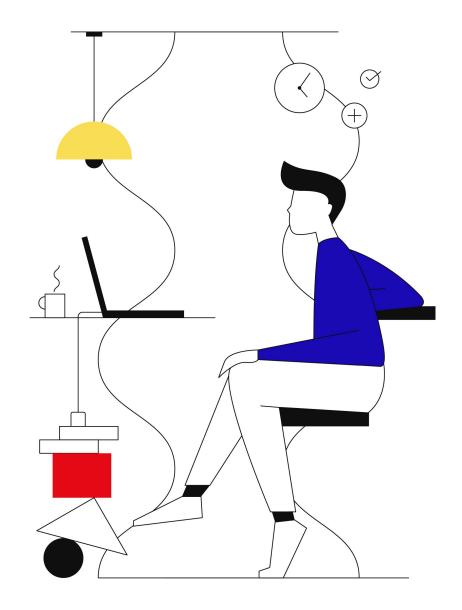


5. Instruction techniques (5/5)

Giving feedback is maybe the most empowering instruction technique if done correctly.

Always structure feedback in 3 parts:

- Affirmative feedback: you affirm that the student is motivated, understands concepts, is hard working...
- Negative feedback: areas in which the students need to improve. Always reformulate the negative feedback in a constructive way: student needs to practice more javascript...
- Tips on how the students can make improvements discussed in the second part of the feedback: this web site offers a large choice of exercises, you can speak with this students who succeeded to make an improvement on this part...



Let's keep In touch.

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