



# Distributed Is Different

## Part 2: Your Space & Tools

## Setting Up Shop

As a distributed worker, your first priority is to make – or find – the space in which you can do your best work.

For some people, that means a co-working space where they pay a recurring fee to use a shared office. For most people, that means using part of their home as their working space instead.

Every person's needs and preferences will be unique, but there are a few common things that almost everyone will need to think about in setting up their work space and getting the most out of their tools.

This part of the guide is about the following topics:

- Work furniture & ergonomics
- Internet connection, WiFi, & wires
- Physical spaces & your memory
- Video & audio setup and habits
- Making text-chat more than words



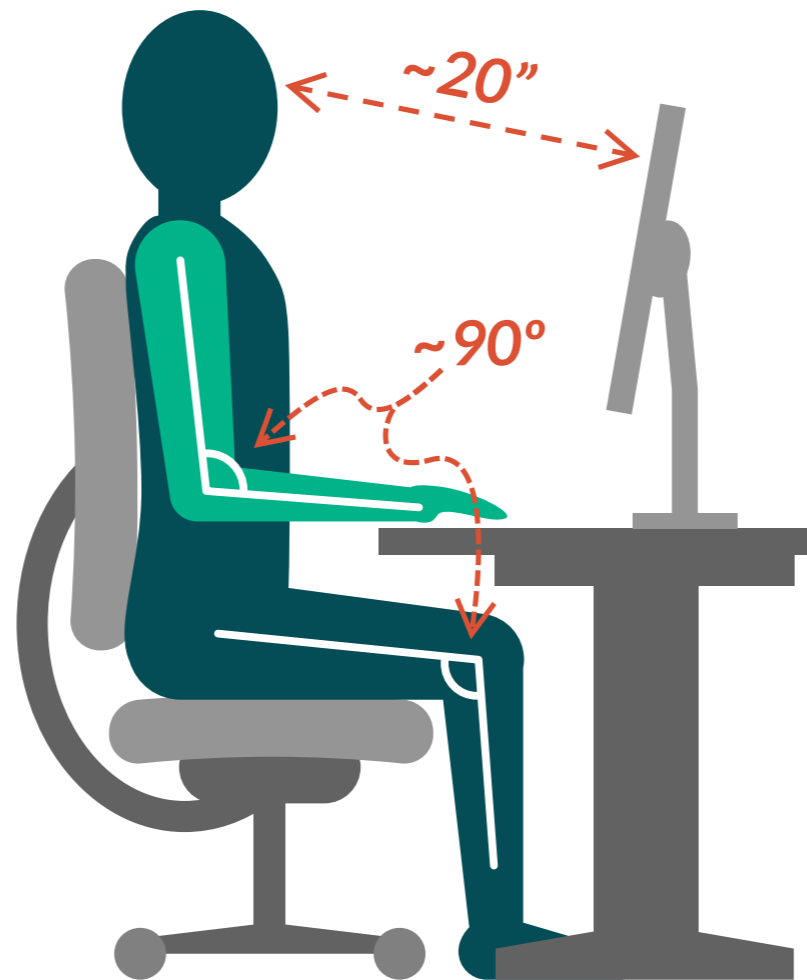
## Sitting & Standing

Most of the work we do as distributed workers involves typing things into computers. While that privilege is something to be thankful for, it's important to remember that the nature of that work makes repetitive-strain injuries (RSI's) likely and common.

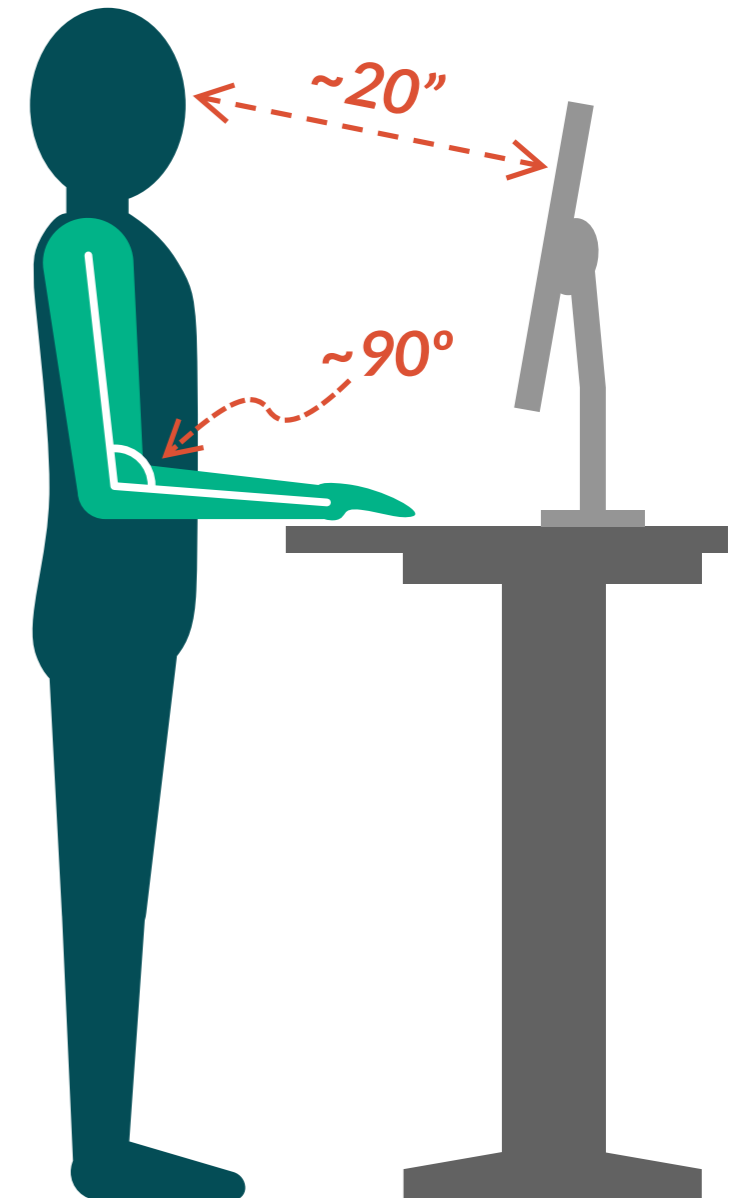
The study of ergonomics is on-going, but currently there is no magic way to work on a computer that doesn't have a down-side: both sitting and standing for long periods of time are bad for you.

The good news is that regardless of which way you prefer to work, the best tip for staying healthy is the same: **move around regularly**.

Picking good furniture is important (*especially chairs!*), but more important is to **vary your movements and position, take breaks**, and **stretch**.



*If you prefer sitting, try to spend most of your time in ergonomic postures. Take breaks to stand, stretch, and move around.*



*If you prefer standing, try to use things like foot rests, cushioned floor mats, or perching to vary your stance over time. Stretch!*

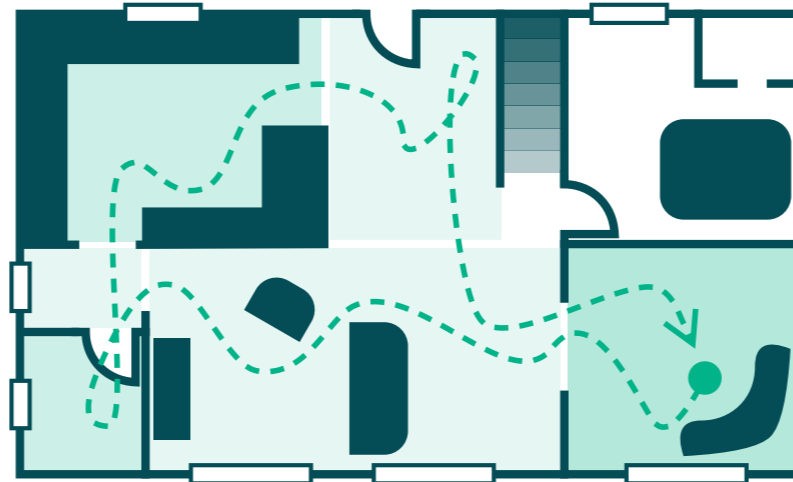
## Space & Time

We gather information into short-term memory as we go through time. But as the name implies, this storage is meant to hold a few things for a short while.

In order to transition to long-term storage, we use something called “**episodic memory**”: our brains assume that a **change of place** means that the things we were just remembering are less important than things about the new place, so it **starts a new page** of notes in short-term memory and shunts the last place’s page off to long-term.

In-person work environments have these place-changes built into them: meeting rooms, break rooms, other peoples’ offices. Your distributed work space probably won’t have this automatic movement between spaces.

This is another reason to **move around regularly**: you’ll keep your brain from feeling full due to constant short-term memory accumulation with no long-term memory transitions.



*A change of physical space is a trigger for our memory-processing centers to start or return to a page in our brain’s notebook.*



*Remember the “airlock” time that in-person environments afforded: the built-in break you get when moving from space to space.*

The same physical arrangement of spaces that in-person work requires has another side effect: it gives you opportunities to move through “**psychological airlocks**”.

For example: your meeting ends, so you get up and walk down the hallway back to your desk. Not only have you now transitioned in space, but you’ve had a **transitional moment in time** to recenter before you restart your work at your desk.

Without taking some deliberate pauses between tasks in your distributed work space, you are likely to **feel more busy** than you think you *should* feel: you’ve lost your airlocks, and the abrupt transitions will take their toll on your ability to concentrate and learn.

It can be a great help to evolve a **daily routine**. Having even a relaxed but regular structure to your day will give you anchor-points in space and time for both airlocks and episodic transitions.

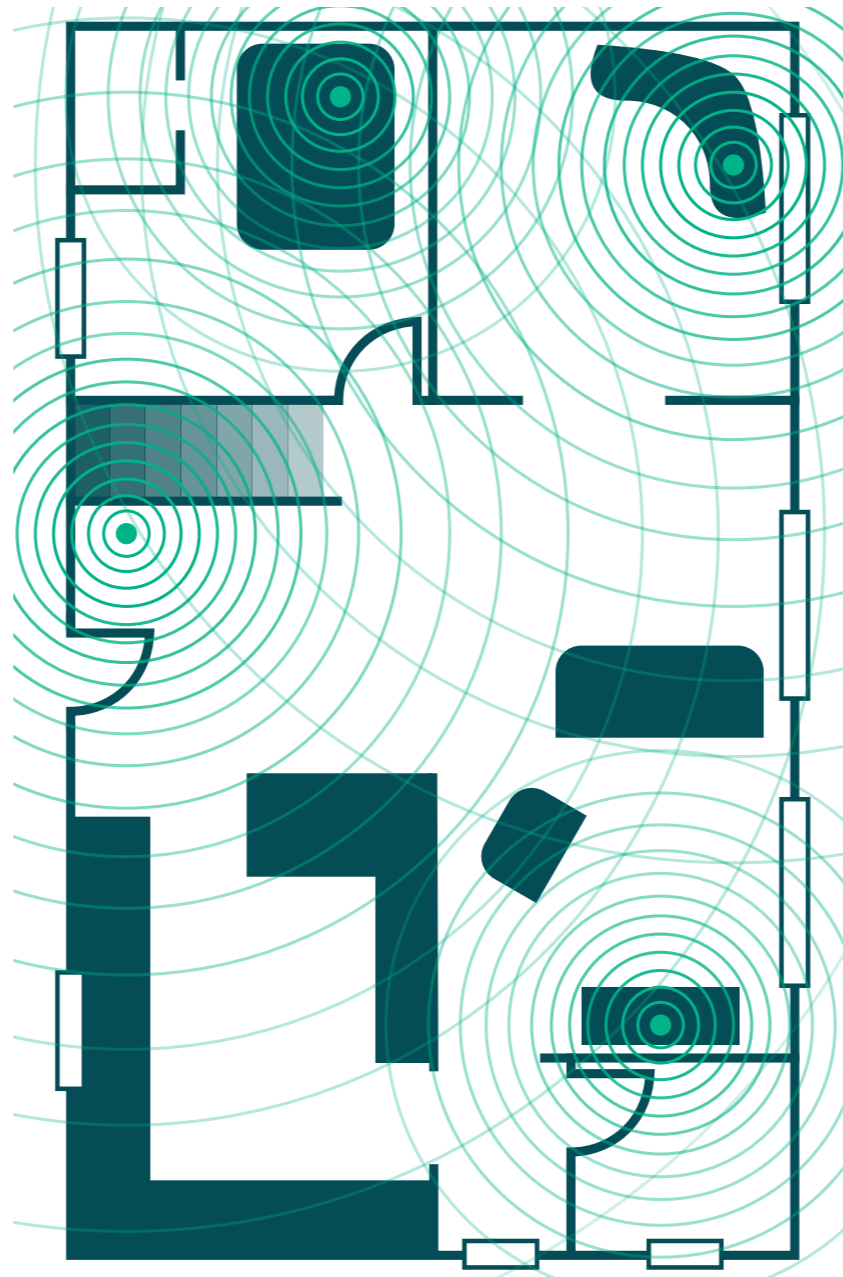
## Internet, WiFi, & Wires

The Internet enables and powers distributed work environments. It is the most important tool in your toolkit for doing your work, so make it a priority.

Video conferencing needs similar bandwidth as streaming movies, but remember that you're not just watching *one* video stream! Your Internet connection needs to handle not only watching a number of videos at once (one per person), but *sending* a video stream, too. You will probably need Internet speeds of at least:

**Download:** 15 Mbps  
**Upload:** 3 Mbps

These speeds are the baseline for your computer to handle video chat with nothing else using your connection. You'll need more speed if you share it with people or other devices. WiFi connections have a particularly hard time keeping **multiple devices** active at once. Some newer WiFi routers handle this better, but they only raise the device limit, they don't remove it.



*Wireless connectivity is pretty much like all your devices shouting in one room, in tiny voices that you can't hear.*

While your speed might be fast enough, remember that WiFi slows things down due to noisy signals: you won't get *all* of that speed without a wired network connection to your computer.

Wireless connections can **degrade due to interference** with other signals, and not just other signals of the same type. For instance, your microwave oven can also emit electromagnetic waves on the same frequency as your WiFi router! Other, unexpected things in your space can also either send out competing signals or dampen your WiFi signal:

- Cordless peripherals like mice
- Metal-backed mirrors & appliances
- Energy-efficient windows

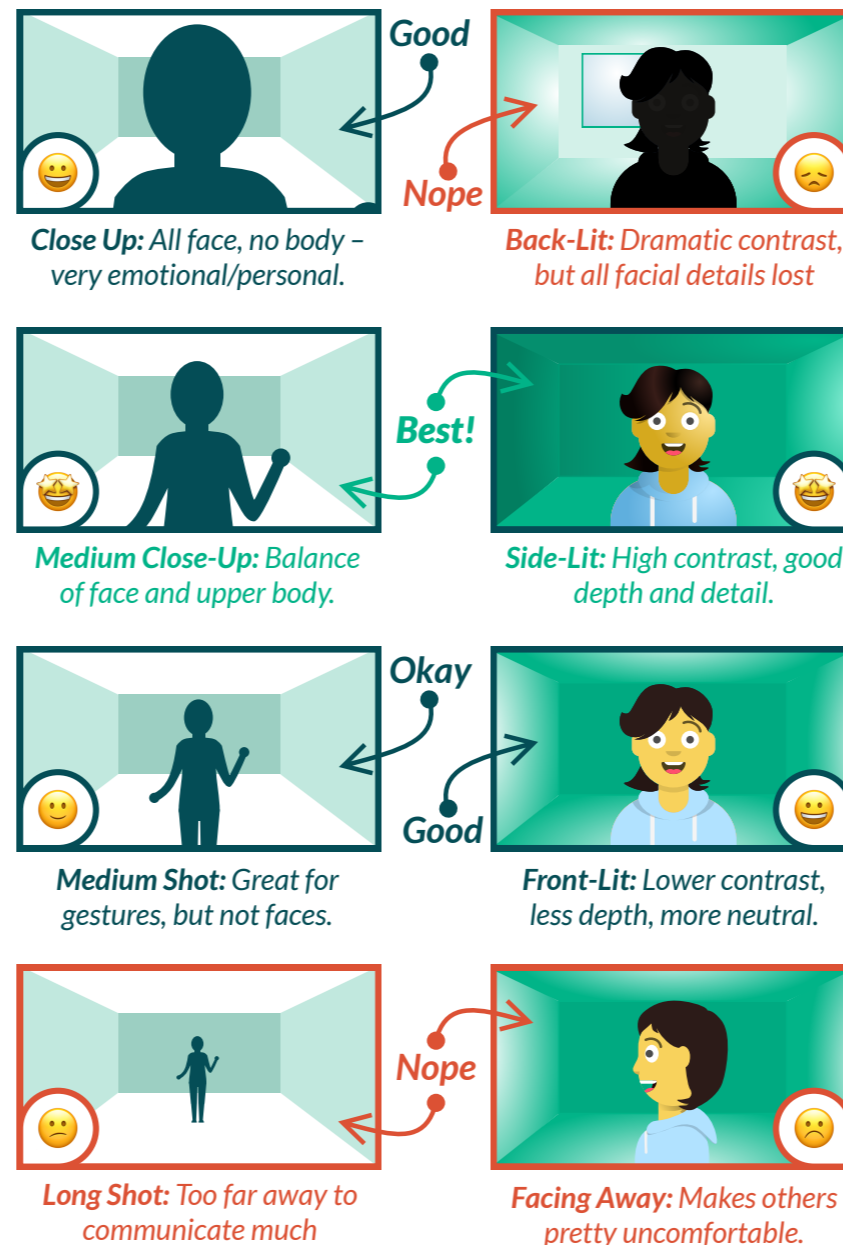
If possible, **use a wired connection**, especially for things that need a reliable stream of data like video or audio conferencing. Most WiFi routers have wired network ports built in; besides the cable, you might need a (*cheap!*) network adapter to use one.

## Video Chat & Cameras

Since video chat is the richest medium available for interactions across our distributed environments, it's likely that you are going to be "on the air" at least once a day. Here are two key things to keep in mind for your air time:

- **Face your camera.** We can't make direct eye contact via video, but it is one of the most important things in our interactions. If your camera doesn't aim at your face, you will make other people feel like you aren't willing to make eye contact.
- **Put your video window as near your camera as you can.** Even when facing your camera, you will have the best results if the person you're looking at is as close to your camera's lens as possible. Remember that to really look someone in the eye (from their perspective), you have to *look at your camera*, not their face on your screen.

**Buying a (cheap!) external camera will give you better control of the above.**



Keep in mind how many people you are interacting with on your video chats. The more people involved, the smaller the individual video feeds will look on everyone's screens. The smaller the video images are, the fewer non-verbal things will be noticed by others, and the more you should **over gesture**.

For example, in a chat with one other person, you might be large enough on their screen that a nod of agreement is noticeable. In a chat with four or five people (or when sharing content) your nod should be replaced with a thumbs-up, or other more expansive gesture.

It's a good habit to get in regardless: even in a one-on-one video chat, the other person could have your video feed in a small window that will make subtle gestures or facial movements invisible to them.

Verbal reactions are also important, but not always possible: multiple people saying "yes" will get jumbled in a way that multiple thumbs-up won't.

## Audio & Microphones

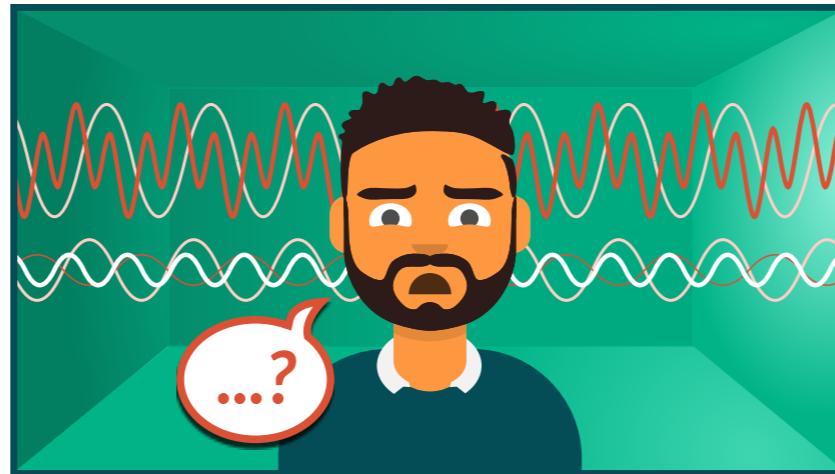
Another key ingredient in distributed interaction is audio. Most of the time your audio will be a part of a video conference, but sometimes it will be your only channel for information.

### First, **Microphones:**

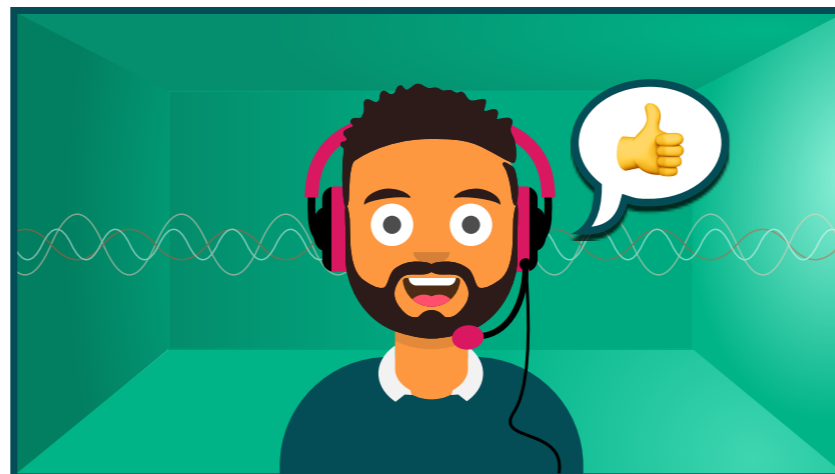
Your computer probably has a built-in microphone: it might be next to the camera lens, or near the keyboard. Be aware that your computer's fan noise is often audible because of how near the built-in microphone is to the fan.

An external microphone (or a microphone built into a headset) will give you better control of where the microphone can be placed, and will also keep the sound of your voice distinct from the sounds around you.

Remember: **always keep your microphone muted unless you are talking!** The inadvertent sounds picked up by your microphone will interrupt and distract speakers, and prevent listeners from hearing what matters.



*Using speakers with a microphone is not much better than a speakerphone: ambient noise and cut-outs will make it hard to hear or be heard.*



*A wired headset, or wired headphones with external microphone will give you the best chance of hearing and being heard clearly.*

### Second, **Headphones & Speakers:**

While the speakers built into your computer will work well enough for audio chat, remember how much we all hated speakerphones when they were a thing. In order to prevent a feedback loop, your computer may mute your microphone when the speakers are making noise, or vice versa. That can mean that either you miss part of what someone else says, or they miss part of what you say.

Headphones are a great option, as they not only get around the temporary-muting problem but also let you control the relative volume more easily.

Don't forget that much like WiFi, wireless headphones can suffer from signal interference from other wireless devices. Be aware that most **wireless headphones will create a small delay** in what you hear, which can make carefully-timed interjections difficult, especially on top of the inherent delay that Internet communication creates.













## More Than Words

While video- and audio-chat are very common interaction media, you will probably find yourself interacting most by reading and writing in text-chat.

Pure text is a stifling medium: it carries almost no other content than pure language itself. On the other hand, it does allow multiple conversations to happen at once, produces artifacts that we can search and reference later, and lets people interact asynchronously.

Since the very early days of group text-chat, we have constantly looked for ways to add non-verbal and **emotional subtexts**. Emoticons like :) or :( allowed some of that expression, and emoji like 😊 and 😞 have expanded those early expressions, making them much more nuanced and broadly understandable.

Use emoji to enrich your text wherever possible. Remember that the intent is to add emotional context or subtext to your interactions: don't use custom emoji that are just pictures of words.

	Agreement, approval, or acknowledgement		Cleverness, acumen, or judgment
	Disagreement or disapproval		Educational, scholarly, or informative
	Praise, celebration, or encouragement		Sarcasm, banter, quipping, or parody
	Strong affirmation, conviction, or consent		Reading, reviewing, or paying attention
	Deferential thanks or polite gratitude		Provocative, exciting, or audacious
	Good luck or encouragement		Affirmation, consent, or completion

*These are some common emoji used to convey emotional context or reactions, much like non-verbal gestures do in person.*

*More accurate, diverse emoji are great for situations of individual expression.*



*More cartoonish, universal emoji are great for things like reactions to messages, so that other people can easily join your expression.*



Most text-chat systems allow you to interact either in shared groups or channels, or in private direct messages to one or more people. Wherever possible **use groups or channels** rather than direct messages. While privacy is important in many situations, keep in mind that those messages create “*information vaults*”: details get locked up in places where others can't find them. Just because your chat seems like it wouldn't be interesting to anyone else right now doesn't mean it won't be useful to others in the future.

Lastly, if you do need to interact with a specific person either directly or in more open channels, remember that the notification your message creates might interrupt whatever they are busy doing. If possible, take a moment to **check their calendar** before you reach out, and hold your interaction for a time when they aren't focused on something synchronous (like a meeting). If that's not possible, use emoji to indicate urgency, or lack of it.

## Proactive Participation

All three major interaction channels readily available to distributed teams are significantly more constrained than in-person interactions. We lose a lot of signals because of the lack of shared physical space and context.

To make the most of the partially-filled facets in the grid to the right, you will need to **practice more proactive communication habits** than in-person environments have required of you. Using things like over-gesturing and simulating eye contact in video chats, clear sound in audio chats, and emoji for emotional subtext in text chats are important to keep those circles from dropping from partially-filled to empty.

This proactive participation can feel a bit unnatural at first, but your practice will pay off: your interactions will feel more substantial to you and others, helping reduce the feeling of isolation that more passive habits can create.

Facets of Interaction	In-Person	Video Chat	Audio Only	Text Chat	Email
Words/pure language	●	●	●	●	●
Intonation/subverbals	●	●	●	◐ emoji	◐
Pacing/delivery variance	●	●	●	◐	○
Precise interjection	●	◐	◐	◐	○
Microexpressions	●	◐	○	○	○
Broad body-language	●	◐	○	○	○
Eye contact	●	◐	○	○	○
Ad-hoc concurrency	●	○	○	◐	○
Gaze-tracking	●	○	○	○	○
Concentration estimation	●	○	○	○	○
Microgestures	●	○	○	○	○
Positional sound	●	○	○	○	○
Touch/haptics	●	○	○	○	○
Spacing/proxemics	●	○	○	○	○
Common peripheral stimuli	●	○	○	○	○
Searchable content	○	○	○	●	◐
Asynchronous participation	○	○	○	●	●
Referenceable artifacts	○	◐ recordings	◐	●	◐