

Using embodied and kinesthetic learning activities online

This chapter explains the importance and benefits of using kinesthetic and embodied activities. It offers tips on successful in-person and online education implementation. After reading this chapter, you should be able to:

- ✓ Explain the importance of including kinesthetic activities in your educational courses and programs,
- ✓ Describe at least two methods for kinesthetic learners in your activities,
- ✓ Compare embodied and kinesthetic learning activities in face-to-face, online synchronous, and online asynchronous learning.

This chapter includes the following sections:

1. *Definitions, characteristics, and importance of using embodied and kinesthetic learning activities*
2. *The role of the educator in embodied and kinesthetic learning*
3. *Easy steps for incorporating movement in your learning activities*
4. *Embodied and kinesthetic learning in face-to-face, synchronous, and asynchronous education*
5. *Asynchronous education as a challenge for kinesthetic and embodied activities*
6. *Questions for reflection*
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1. Definitions, characteristics, and importance of using embodied and kinesthetic learning activities

Before we dive into the practical part of this chapter, let's look through some theoretical information about kinesthetic learning, embodied learning, and body intelligence.

The bodily-kinesthetic learning style is an integral part of Howard Gardner's theory of Multiple Intelligences, often used when talking about education, course, and lesson planning. It refers to a person's ability to physically process information through (control of) movement and bodily expression.

We are all kinesthetic learners to some extent. Of course, a lot depends on the information delivered – for example, manual skills are best learned using the kinesthetic way. Also, watching a person doing movements activates mirror neurons like those we use while doing the activity ourselves. It reinforces the memory processes and aids learning in unique and exciting ways.

Some people prefer kinesthetic learning to others: we'll call them kinesthetic learners. For example, they want to touch and manipulate objects when learning about them. Kinesthetic learners usually love working and using their hands, have a lot of energy, and like to move.

When thinking about kinesthetic learners, keep these characteristics in mind:

1. They cannot sit still for a long time,
2. They understand more and better when learning through hands-on experience and movement,
3. They can get bored and have difficulty concentrating on "dry" presentations and traditional approaches to learning,
4. They like to directly engage with the material (for example, building things and working with their hands),
5. They are interested in being active participants rather than passive observers of a learning process,
6. They love testing and experimenting, as well as creating in a learning process,
7. They need more breaks – they get restless when sitting for long,
8. They can be expressive by nature and gesture a lot.

The **TACTILE** LEARNER

Characteristics

1

Moves to learn

Also known as a kinaesthetic learner, you learn by touching and doing. You favour physical movement and are probably good at sport.

2

Likes hands-on

You prefer to move, build, touch and draw, rather than listen or watch. You like to try something for yourself.

3

Does to remember

You remember things best when you have done them yourself, for example cooking a meal or fixing an engine.

4

Gets fidgety

You tend to start fidgeting when you've had to sit still for too long or when something is getting boring.

5

Struggles with ...

You may suffer from a short attention span and can find it difficult to sit still.

Learning Tips

Examples

1

Training that uses examples and case studies to explain concepts will be easier for you remember.

Discuss

2

Try discussing what you have learned with someone. This can help you remember things better.

Get active

3

You will take information in better if it is accompanied with activity. Try active learning, like role plays and problem solving.

Move

4

Move while you study. Tap a pencil (if appropriate), squeeze a ball, shake a foot. This can help to keep you focused. Typing can also help reinforce learning.

Take breaks

5

Don't attempt marathon study sessions. You work better in short, frequent bursts. Do something physical in your breaks.

Doesn't sound like you? Most people are a mixture of styles. Check our other infographics on learning types.
www.workreadytraining.com.au

Work Ready
Training

Source: <https://www.workreadytraining.com.au/whats-your-learning-style-tactile-learner>

Embodied learning is a modern educational model that goes beyond kinesthetic learning. Recent developments in cognitive science, pedagogy, and andragogy focus on the added value of the embodied learning model, which dictates that **the body and brain work together as a part of a linked system**. Body movements influence cognition, just like cognition influences body movements! For example, when you move the muscles included in a smile, your thoughts will get more settled.

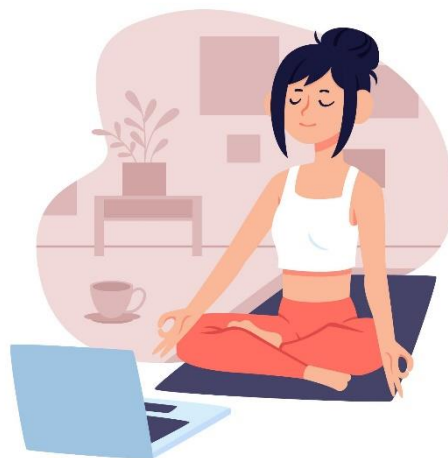
Body Intelligence (BQ) comprises awareness, knowledge, and body engagement.

- *Body awareness*: you know your body and can describe the physical sensations you are feeling. It also includes being conscious of body signals and adjusting according to them.
- *Body knowledge*: “health literacy”. It includes knowing the standards, guidelines, and practices for ensuring a healthy body.
- *Body engagement*: doing what’s best for your body, with your body.

2. The role of the educator in embodied and kinesthetic learning

In the virtual space, physical movements and sensations are limited. You should find new ways to involve and engage your learners, especially those who prefer kinesthetic learning methods. You are responsible for creating a safe and inspiring environment that will activate your learners in all ways possible to keep them engaged – and it’s important not to forget about body and movement.

It is essential to build and deliver educational programs with the well-being of the participants in mind - but it is also necessary to cultivate your body intelligence because it will help you maintain sufficient energy through the demands of online education. Pacing yourself is important!



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3. Easy steps for incorporating movement in your learning activities

How to accommodate the needs of our learners, especially kinesthetic learners, when we are not in the same physical environment and communicate only through digital platforms?

You can approach kinesthetic learners through four sides: hands-on, whole body, artistic, and emotional. While a hands-on learner may prefer a challenging game that involves point-and-click actions, creative learners will choose to express themselves during the online learning activity creatively. For example, they might create drawings or doodles or take visual notes as they process the information. Whole-body learners benefit from [online simulations](#), and emotional learners do well with using images and storytelling techniques, for example, "[Story of your name](#)" or "[Drag and drop story](#)". It is essential to do a needs analysis of your learners so that you can customize the learning experience to meet their needs and preferences.

As we mentioned, kinesthetic learning experiences should be tactile, involving movement, interactivity, and direct contact with the learning materials. All these things can be difficult to achieve in the online setting. Try this interesting activity - [Dancing Hands](#) from our Trainers' toolkit.

Seven methods for including kinesthetic and embodied learning in your online activities

✓ **Include a wide range of tactile activities in your program**

Even if you don't have the time, resources, or cutting-edge technologies to create highly immersive materials, you can still introduce tactile elements into your course through simple learning management tools such as drag-and-drop activities and flashcards. Here you can check a video tutorial on [How to Create Drag and Drop Activities on Google Slides](#). And [here](#), you can read step-by-step instructions on creating drag-and-drop activities.

[Quizlet is an educational app](#) where you can create your educational **flashcards** for online use. According to research, "clicking on an object and moving it to a target can make online learners feel more connected and improve knowledge retention."

One example is developing tablet or mobile-based activities requiring swiping, tapping, and motion controls. Check out instructions on developing [tablet-based activities](#).

Interactive presentations are another way to make your program kinesthetic-friendly. To grab and hold learners' attention, you could use one of these [12 software for creating interactive presentations](#).

✓ **Make program materials as engaging and interactive as possible**

One mistake in online education is believing that we can primarily involve only our eyes and ears. Using modern technology, use different methods to include your learners' sense of retention (touch). To create realistic, immersive experiences for online learners, you could use [Virtual and augmented reality environments](#), and [simulations](#). Of course, we understand that not all of you will be able to use these complex modern technologies for your courses, but at the same time we believe that this information can sparkle your curiosity and may lead to new creative ideas.

Even simple enhancements to lectures, such as including pictures or sound effects, can help remind learners of the real-life situations that the material is related to and can thus increase the understanding and engagement of your learners. One great way to motivate learners is through the use of [mind-mapping activities](#) and assignments, allowing learners to layout images and make tactile connections. If you like adventure games, learn how to create your [point-and-click eLearning games](#). You can also check our set of embodied resources for online classes at: <https://trendss.eu/trainers-survival-kit-in-the-digital-era/>!

✓ **Make it Emotional**

Online experiences linked to emotions are more memorable, and as we mentioned earlier, kinesthetic learners need this connection. You can use different colors and visuals that evoke strong positive emotions. Investigate using graphs, infographics, progress bars, and other means to create visuals. Don't forget about music!

It would help if you created assignments with real-life connections through material kinesthetic learners can connect emotionally because this helps visualize real-life applications and abstract concepts. This can be done by using methods of [role-playing activities](#) and case studies. You can find more detailed information about role-playing as a method [here](#).

Kinesthetic learners love real-world case studies and examples – include them in your program! They will inspire and motivate your learners and help them to relate to the subject matter on a more profound, personal level.

✓ **Use video creation assignments**

Asking learners to create videos can help encourage kinesthetic learners to incorporate physical activity into the information they are learning, thus retaining them. For example, you could ask learners to keep a video blog or make videos of themselves performing a task related to the course material. Some user-friendly video editing apps are [Adobe Premiere Rush](#) and [DaVinci Resolve](#). For mobile creation, try [PowerDirector](#) or [Quik](#).

✓ **Send learners on virtual field trips**

Because kinesthetic learners enjoy exploration, immersion, and emotional involvement, creating and sending them on virtual field trips are excellent options for helping them engage in new topics. You can either send learners to websites that have already put together field trips, create it yourself (here is a [tutorial](#) on this), or assign learners to develop their own field trip by virtually visiting several websites or physically visiting local sites and taking videos or pictures. Check out [Roundme](#), [Google Earth VR](#), or [Google Arts&Culture](#).

✓ **Invite learners to explore through experimentation**

Instead of simply offering your learners the answer to a common problem or challenge, provide them with the resources they need and ask them to arrive at their conclusions. Include links to external articles, sites, and videos they may find valuable and supplemental online activities that they can access on their own time.



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Three core facilitation principles for kinesthetic learners

While designing your course, we hope you will consider different learning styles and create a multi-sensory program. Meeting the needs of kinesthetic learners isn't limited to a course design, though. Consider the following tips when delivering your program:

- 1. Challenge learners to do simple tactile exercises.** Encourage learners to take notes in a way that makes sense to them. Remind kinesthetic learners to draw sketches or diagrams of what they're learning or stand up and physically act out a concept if they can. You can use the Annotate feature in Zoom and allow learners to write and draw on the whiteboard or slides that you are presenting. [Here](#) you can find a tutorial.

You can also suggest writing notes on post-its and sticking them on the wall in a pattern that helps organize concepts. Or you can use online interactive post-its through [Miro](#), [Stormboard](#), [Mural](#), [Limnu](#), or [Conceptboard](#). You can also create templates or handouts that learners can print out and fill in to keep their hands engaged. These techniques will help kinesthetic learners focus on and retain what they learn.

- 2. Remind learners to take a break and move.** As you already know, kinesthetic learners have trouble sitting still for a long time and keeping focused on a static resource or topic. It is crucial for this type of learner and all others to have frequent breaks with physical movements. Try our activity "[Objects around you](#)" or "[Outfit for today](#)". On top of that, you can use different resources from the website [Physical Activities - Cube for teachers](#), for example, this fun activity "[Star wars would you rather](#)" or [PE games for Zoom](#).
- 3. Help learners visualize complex processes.** Steps and procedures can be complicated for kinesthetic learners to follow unless they can imagine themselves following the steps. So, if an assignment or instructional material contains a complex process, encourage learners to visualize themselves doing the procedure to help them associate physical motions with the information.

4. Embodied and kinesthetic learning in face to face, synchronous and asynchronous education

Face-to-face education	Synchronous education	Asynchronous education
<p>In face-to-face education, you are in the same physical environment as your learners - you can observe, evaluate, and react to the participant's body language and different physical and body language cues.</p> <p>When you use embodied pedagogy in your class, your aim is to engage learners, raise emotions, activate all senses and create an atmosphere where learners interact with each other and space around them.</p> <p>Because of the close social proximity in face-to-face learning, you can have embodied interactions in a shared physical space and use physical activities, games, and challenges that can satisfy the kinesthetic needs of all learners. You can use different techniques to increase or decrease dynamic in the group by connecting with their own bodies.</p>	<p>In a synchronous setting, learners can see and feel your presence, you are embodied in the process of teaching.</p> <p>You can partially see and observe the participants' body language if their cameras are on. If not, you could ask them to describe their state and mood with emojis.</p> <p>You can use some physical activities, games, and challenges to engage kinesthetic learners – it can be in front of the screen or not.</p> <p>In online synchronous education you can use the same tips as in face-to-face setting, you just need to adjust and modify activities for online use.</p> <p>It is important to pay attention and consider the learners' embodied presence in the virtual classroom. You could use physical activities that helps to feel present into the moment, for example gentle breathing exercises or “chair yoga” with various stretches. This way you can create a cognitive reset and “recharge batteries”.</p>	<p>The biggest difference is that in an asynchronous setting you cannot see learners and cannot assess their current physical state.</p> <p>Your task is to design the learning environment in a way that involves tasks for different learning styles, including kinesthetic. Instructions should be clear, easy to understand, and motivating. Read our suggestions and try to find your own way to reach all your learners through diverse methods and techniques.</p> <p>In an asynchronous setting the concept of embodiment is quite different from face-to-face and synchronous online learning.</p> <p>One advice for establishing your presence in an asynchronous setting, is to create a video-based introduction and course orientation at the beginning of a course, so you can welcome learners and let them see and know you as a real person.</p> <p>Check out these five strategies for enhancing educator presence in online courses.</p>

Try to use material from the sites [Calm](#) and Greater Good in Action of [Berkeley University](#).

Search for different creative ideas and activities in our TRENDSS [Trainer's Toolkit](#).

The embodied presence of educators and learners depends on what the technology offers. One way to make e-courses more interactive, engaging and immersive is to use avatars. Avatars are characters created to narrate, guide, and interact with learners. The avatar can be a text, image, icon or 3D shape through which educators and learners can participate in the e-course. Find out more about why, where and how to use avatars and try to see if this will work for you.



5. Asynchronous education as a challenge for kinesthetic and embodied activities

We already discussed how you could involve kinesthetic learners in the digital realm, but it mainly applies to the synchronous mode of digital education. One major challenge is to create quality educational programs for asynchronous forms of learning adjusted to the kinesthetic learners because you cannot facilitate the process and use different activities in real-time. All emphasis here should be on incorporating tasks for kinesthetic learners in the programme/course design.

There are a few solutions to consider:

- **Brain – Body coordination activities.** Include different [videos about body coordination](#) in your educational materials. Make it optional but try to motivate learners by giving them cues and explaining how these exercises stimulate the brain and make the learning process easier and more effective.
- **Use timing methods.** Make suggestions for learners to use regular breaks from studying to get their energy out regularly. [TomatoTimer](#) is an easy-to-use online Pomodoro technique timer. There are a lot of different apps that you can share as an option in your educational programs.
- **Use tactile digital tools.** It is impossible to handle objects and interact with each other in the asynchronous educational course. Use digital simulations and resources such as animations, video clips, or other freely available multimedia for low cost ([MERLOT](#), [WikiMedia](#), etc.). Use [eLearning games](#) and mobile learning activities that can help you integrate the sense of touch into your digital course.

The simple act of clicking or swiping the screen can make your learners more immersed because it gives them the option to interact with the material. Use drag-and-drop activities, quizzes, and other simple ways of making your asynchronous education interactive!

6. Questions for Reflection

1. *Looking back on the transition to remote teaching and your digital transformation, how did you take care of and nurture yourself? How did you satisfy your kinesthetic needs while designing and teaching digital educational programs?*
2. *Which provided above methods for engaging kinesthetic learners in the educational process do you like most and why? And which ones are challenging for you? How can you overcome those challenges?*
3. *Which instructional methods could you bring from the face-to-face teaching practice to the digital space, which could help kinesthetic learners be fully involved in your synchronous and asynchronous digital courses?*

7. References and resources

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Bonk, C. J., & Zhang, K. (2006). Introducing the R2D2 model: Online learning for the diverse learners of this world. *Distance education*, 27(2), 249-264.

Clemons, S. A. (2004). Developing online courses for visual/kinesthetic learners: A case study. *INSTRUCTIONAL TECHNOLOGY*, 51.

Drago, W. A., & Wagner, R. J. (2004). Vark preferred learning styles and online education. *Management Research News*.

Webpages

- [5 Kinesthetic Learner Characteristics and How They Learn Best -](#)
- [Learning Styles: Kinaesthetic Learner Characteristics - Instructional Design For Kinesthetic Learners: 7 Techniques To Employ](#)
- [Bodily Kinesthetic Learning Style and Characteristics](#)
- [Montessori and Embodied Method of education.](#)
- [Embodied Cognition. The Stanford Encyclopedia of Philosophy](#)
- [Embodiment and embodied learning in online learning environments](#)
- [Embodied learning at a distance: from sensory-motor experience to constructing and understanding a sine graph](#)
- [Teachers' Embodied Presence in Online Teaching Practices](#)
- [Instructional Design For Kinesthetic Learners: 7 Techniques To Employ](#)
- [Learning through Interactive apps: 10 benefits to Visual and Kinesthetic Learners](#)
- [Five strategies for enhancing instructor presence in online courses](#)