Balance

Whether you're a beginner or an advanced dancer, having good stability and balance enables you to move through your motions more quickly and fluidly. While it looks easy, your base of support continually changes when you're dancing.

Balance is a lifetime achievement, a process of learning
to navigate in the world that begins in infancy and continues into old age.

We are upright skeletons with many joints and muscles, tottering over a small base of support.

Add our high centre of gravity, and we oscillate like an inverted pendulum. At the same time, balance is much more than a mechanical phenomenon.

Even from the perspective of neuroscience, there is no one balance "centre" in the brain. Instead, balance emerges from the interplay of many-body systems and the task at hand.

The brain stays busy, continually updating the status of our body and solving three balance problems: 1) "Where am I now?" 2) "Where am I going?" and 3) "What am I going to do next?" 3 Our brains are, in essence "embodied," processing online information moment-by-moment from the body senses and the world. Brain processes for balance are consistently working, attuning to bodily needs for stability as environmental and task conditions change. Whether practising alone in a studio or on stage performing with a large corps of dancers, the dancer's brain is busy processing a lot of input.

The brain integrates multiple mechanical forces coming from our moving body, the ground, and any other objects we are carrying or touching, as well as our perceptions, thoughts, intentions, and emotions. In addition to handling a sheer volume of input, we also need for our complex balance system to control prediction and the actual outcome of our experience.

Balance Within the Dance Context

To handle the complexity of balance, our nervous systems must act fast. For this, we have evolved "postural responses." 5 Postural responses are whole body neuromuscular reflex patterns that activate quickly, either in response to our decision to move or when we are inadvertently thrown off balance.

In ballet, for example, balance reactions often are anticipatory, coming mainly from the dancer's own body. When dancers "prepare" for a port de bras while standing centre floor in the first position, the anticipated movement of the arms disturbs the static standing body. The brain "senses" this intent to move and activates the muscles of the trunk and legs shortly before the onset of arms movement to prevent falling. Similarly, when preparing to tendu, the reflex muscle synergies in the trunk and standing leg activate to maintain balance milliseconds before the gesture leg moves forward.

These quick, whole-body reactions are necessary to support limb movements without excessive disturbance to the centre. Without these anticipatory control signals to the muscles to stabilize the trunk, the dancer might sway excessively or even fall while shifting weight onto the standing leg.

The dancer's brain must be able to modulate changing and multitasking demands –stabilizing the trunk while facilitating the movement of the arms and legs–for expressivity and mastery of technique.

As we mentioned in the video session balance requires three main mechanisms involving visual stimulus, mechanisms within the inner ear, and physical, sensory awareness. This sensory awareness is known as proprioception.

Dancers who rely more on proprioception than visual cues for balancing tend to be more stable. Besides, within dance and sport, it is widely accepted that proprioception reduces the risk of injury due to improved joint and postural stability.

These points should further encourage dance educators to seek ways to enhance proprioception among dancers.

Dancers can switch from one balance mechanism to another. It has also been noted that dance practice alone does not improve proprioceptive mechanisms for balancing, necessitating balance practice beyond the dance class.

Balance Training

Exercise#1: Single Leg Lifts

Two sets of 10 reps. (1 rep = 1 forward, 1 side, 1 back)
Do 1 set on each leg. Rest 10 seconds in between sets.
Benefits: Full Leg & Glutes Strengthening to improve balance

Tips:
1. Engage your inner thighs as you lift your leg.
2. Pause briefly at the top of the lift.
3. You can adjust the height of your leg, depending on how flexible you are. Even if it's only 2 inches off the floor, that's okay!
4. Keep your back straight. Do not hunch over trying to get your leg higher in the air.

Exercise #2: Super "Wo "Man Crunches

Two sets of 10 reps. (1 rep = 1 stretch and crunch on both sides)
Rest 10 seconds in between sets.
Benefits: Core, Back and Glutes & Shoulders

Tips:
1. Stretch your fingers and toes away from each other.
2. Keep your core super tight and your back straight.
3. Squeeze your glutes as you lift your leg.
4. Keep your shoulders square & away from your ears (i.e., don't hunch)

Exercise #3: Walk The Tight Rope

Two sets of 10 reps. (1 rep = 4 walks forward, four walks back) Rest 10 seconds in between sets.
Benefits: Legs, Arms and Core Strength & Alignment

Tips:
1. Keep your steps very tiny.
2. Keep your heels as high off the floor as possible.
3. Squeeze your thighs and keep your butt tight.
4. Look directly forward.
5. Through it, all, pull your towel taut and keep your elbows straight.

Exercise #4: Flip Flop Toe Touches

Two sets of 10 reps. (1 rep = Toe touch on both sides)
Rest 10 seconds in between sets.
Benefits: Shoulder strength and Obliques

Tips:
1. Touch your toes and hold briefly on each side.
2. Keep your hips high as you rotate onto each side.
3. Keep your back flat whenever you transition into the neutral plank position.

Exercise #5: See-Saw

Two sets of 10 reps (Do 1 set of 10 reps on each leg)
Rest 10 seconds in between sets.
Benefits: Full Body Strengthening & Balance

Tips:
1. Anchor standing leg firmly into the ground by engaging the glutes.
2. Stretch your leg long behind you as you lift it.
3. Look directly down and keep your neck long as your body gets parallel to the floor. 4. Keep your core super engaged.

Do these exercises but take your time doing each exercise.
Keep in mind that your muscles must be engaged at all times.
Struggling with a balance is okay you might even fall over doing these, but the consistency will ensure stability in the future.