

Adaptive Yoga for Essential Well-Being

SMART Sequencing

Evidence to support the argument for educating yourself on **Spinal Load**

The NCCIH (National Center for Complimentary and Integrative Health) reported in 2015 that nearly 50 million American adults have significant chronic pain or severe pain. The data, which was collected in 2012, estimated that within a 3 month time span 25 million U.S. adults had daily chronic pain, and 23 million more reported severe pain.

Conclusion: 80% of your students will have low back pain and will benefit from your thorough understanding of the following guidelines:

What is Spinal Load?

Your spine is holding up the weight of your world. Over time the force of gravity and the expression of emotion/attitude by the body can cause displacement of spinal sections and structural imbalance.

“Excessive displacement of the spinal components would result in neurological deficit, deformity or pain. White and Panjabi define instability as “the loss of the ability of the spine under physiologic loads to maintain relationships between vertebrae in such a way that there is neither initial damage nor subsequent irritation to the spinal cord or nerve roots and, in addition, there is no development of incapacitating deformity or pain due to the structural changes.””

In English Please?

The sections of your spine are bioengineered by the powers that be to carry the weight of what lies above, and also to withstand the increase in gravitational ‘load’ when you are walking, running, jumping, sitting, standing or lying down. Certain activities such as jumping or running, will cause brief but strong peaks in spinal load that can stress weaker sections of the spine to the point of injury. Certain positions, such as I am in right now - sitting in a coffee shop, shoulders forward, legs crossed and hunched over a computer typing - can approximate those strong peak loads but over a longer period of time. Ouch!

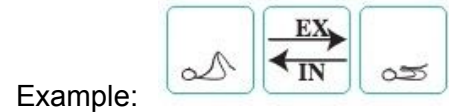
It is important for you to understand the guidelines of spinal load so that you can properly prepare and compensate the weaker sections - mainly the lumbar spine. Below are positions relative to the floor and are ordered from least load (and least dangerous) to most load (and most dangerous especially for anyone who has a diagnosed condition).

Note: This is not about sequencing for spinal load. That is the next section. This is an overview of spinal load and safety issues.

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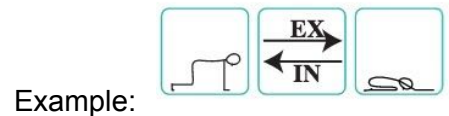
Least Spinal Load = Supine:

An excellent place to begin any practice! Preparations can be made here for asanas of higher spinal load. Focusing on proper exhalation techniques is key!



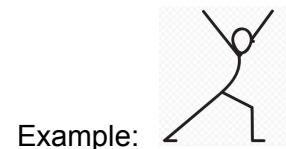
Some Spinal Load = Hands and Knees (and Kneeling):

Also a fine place to begin a practice. There is great potential in this position to not only prepare for later increase in spinal load, but to compensate for higher load asanas.



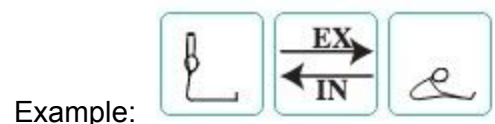
Some More Spinal Load = Standing:

Make your way here. Do not begin here. If you do not create some integrity in the low back by stretching and strengthening it while supine/prone/hands and knees, there is too much freedom for your students to stand, unaware of their spinal alignment. Too much load potential!



The Most Spinal Load = Seated:

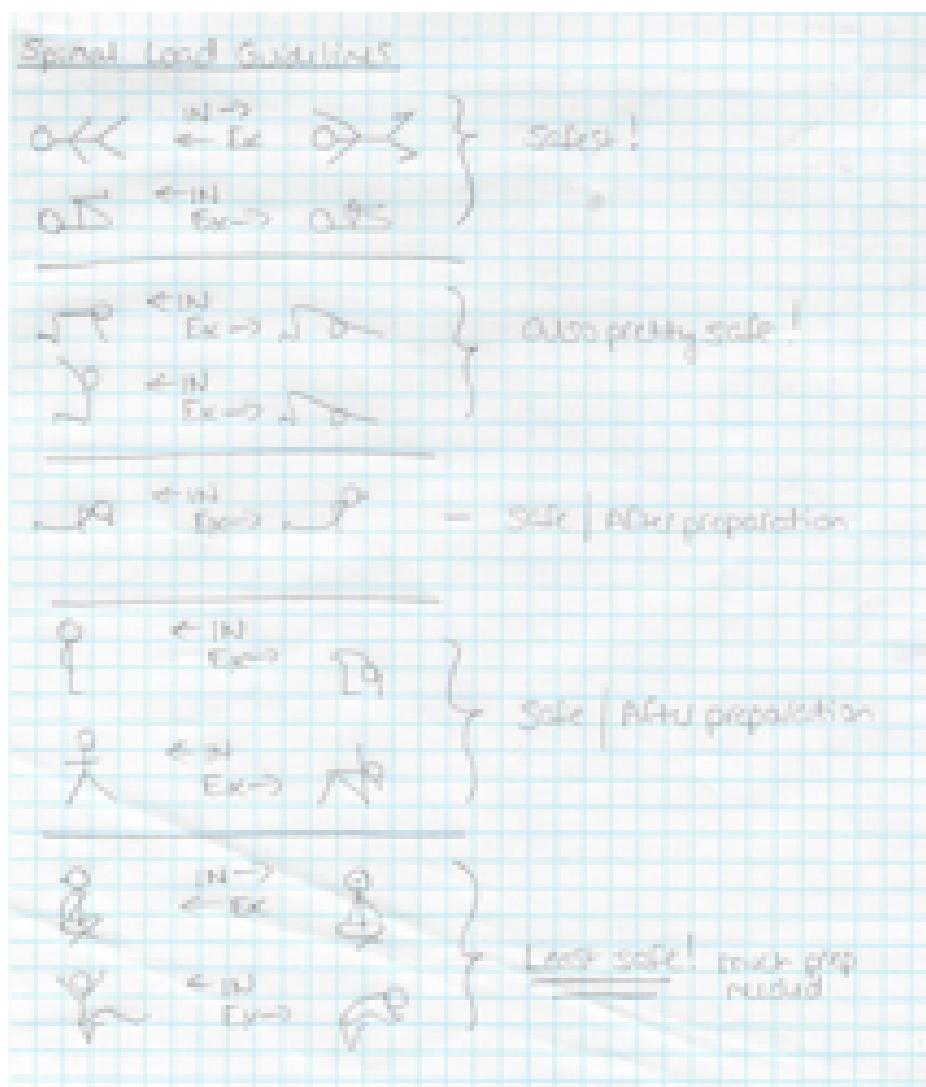
This category has the greatest potential for spinal load. Especially twists! Seated asanas, if you use them at all, should be placed at the end of class (not including breath awareness at the beginning of class). You must prepare the low back well for them!



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Note:

The WORST MOVEMENT OF ALL in terms of spinal load is the 'airport move'. Picture yourself seated at the gate. You are called to board the plane. You twist to one side to reach down to pick up your heavy bag. You pick up the heavy bag as you simultaneously turn back to center and stand up. MORE LOW BACKS ARE INJURED PERFORMING THIS MOVEMENT THAN ANY OTHER.



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Sequencing for Spinal Load:

You could go back through the practices you have already done in this training and compare the sequencing to the general guidelines below.

These are guidelines! You won't necessarily find every position in every practice. However, you will always need to sequence according to the rules in this document.

- Supine / on the Back
- Hands and Knees / Kneeling
- Prone / on the Belly
- Hands and Knees / Kneeling (Transition)
- Standing
- Hands and Knees / Kneeling (Transition)
- Prone / on the Belly
- Supine / on the Back
- Seated
- Supine / on the Back

Sequencing for Direction of Movement / Directional Hub

Direction of movement is yoga jargon for whether the asana you are doing is a backward bend, a forward bend, a lateral bend, a twist or an axial extension, etc.

For the health of your students, which I hope I've established by now, it is of utmost importance that you follow this very very super easy super basic sequencing guideline.

Before you change the direction of movement

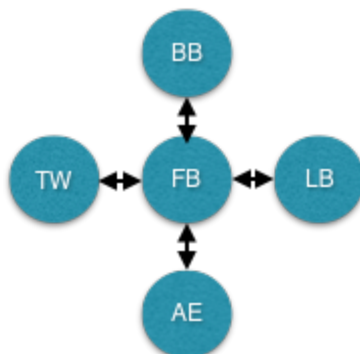
DO A FORWARD BEND

Example: You have just done a twist or a series of twists and you are heading toward a backbend.

DO A FORWARD BEND.

Enough said.

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Sequencing for Preparation and Compensation

In this training we have focused much of our time on learning asanas in sequences that are highly accessible to the general population. There has been little to no focus on 'peak asanas' like Sirsasana/Headstand, for instance. This is intentional on my part. It is my opinion that a yoga teacher must first thoroughly understand and embody the basic principles of sequencing, have had time teaching in the world and especially doing his/her own practice before he/she can fully comprehend *the depth achieved in simplicity of practice*.

Peak asanas require strong preparation, a subtle sensibility and a full in depth understanding of their FUNCTION on an individual - why should a 47 year old woman attempt Sirsasana anyway?

When the student is not prepared to do advanced asana in gross and subtle ways the asana is rendered impotent and reduced to a physical conquest.

Less is more baby (LIMB)

Keep it simple stupid (KISS)

The asanas we have covered deserve your time in practice and contemplation. What does trikonasana really reveal to you? Practice it in the morning, at noon, at night. Practice the different adaptations of trikonasana and see how each version changes the effect on you. It's fascinating work! It's necessary work. If you aren't doing the work - well, you're teaching physical fitness. Not yoga.

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Asanas like trikonasana are more complex than they seem on the surface and they require preparation and compensation if they are to be

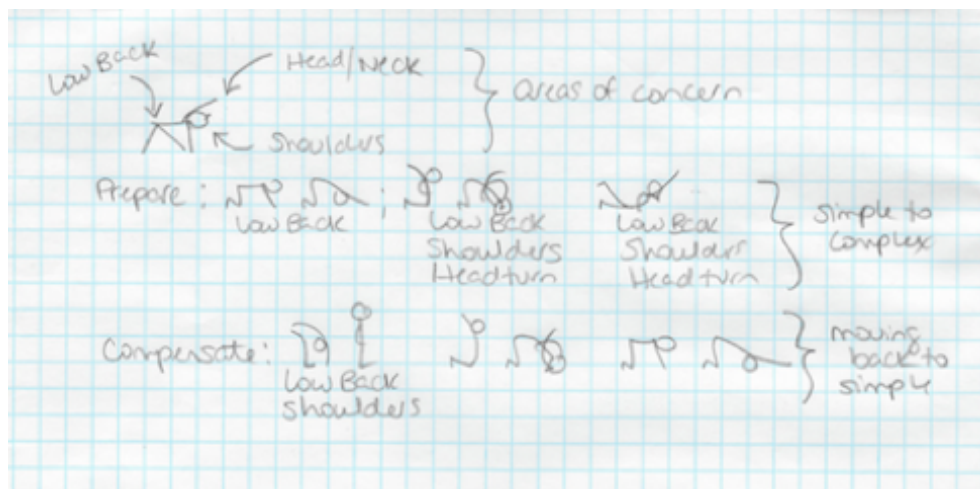
- without risk
- as a way to heal from injury
- as a way to prevent injury

It's a useful exercise to sketch the asana and analyze it for areas to prepare and ideas on how to compensate. See my analysis sketch of trikonasana. I have identified three areas of concern and also jotted down some ideas on which asanas I will use to prepare those areas. I also left some notes on how to compensate.

This is an essential skill you must learn in order to teach yoga with therapeutic foundations. Yoga that heals. Yoga that develops.

Before you go any further!

Exercise: Sketch Trikonasana. What are the areas of concern? Where is the spine stressed? Where are the limbs stressed? Sketch out a series of 3-4 asanas that you think will prepare these areas. Then sketch out a series of 2-4 more asanas which will help compensate for the final asana.



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Sequencing Simple v/s Complex Asana

This is also an aspect of intelligent sequencing and could be filed under preparation and compensation.

In general, you would not begin a class with a complex forward bend such as Janu Sirsasana. Not only does it violate the guidelines we have covered so far - but it just doesn't make any sense!

You would also not place any adaptation of Jathara Parivrtti toward the beginning of class for the same reason. These are more complicated twists and need preparation to build integrity.

What does make sense is that simple forward bends prepare for more complex forward bends. Simple backbends prepare for more complex backbends. Simple twists prepare for more complex. . . . you get the picture!

Furthermore, once you have worked up to the complex asana, you then have to compensate by sequencing in some simpler versions.

In my trikonasana sketch above you will see that I left a note that showed I was following this guideline.

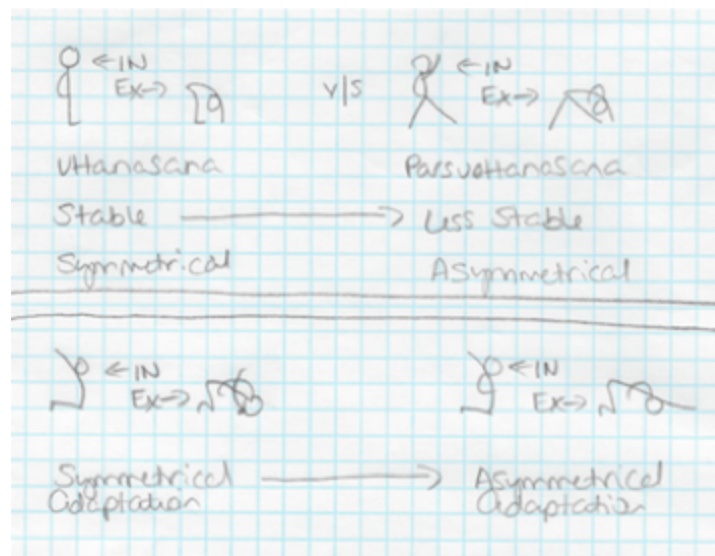
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Sequencing Asymmetrical v/s Symmetrical

Generally speaking, symmetrical asanas are more stable than asymmetrical asanas. Therefore asymmetrical are a slightly higher risk. It's always a good idea to find ground and stability with symmetrical asanas when you've ventured into asymmetric land.

Rule of thumb: Symmetrical postures prepare for and compensate for asymmetrical postures!

And hey, it's just a more elegant design and experience! Try for yourself!



Sequencing Contralateral Movement

I've included this section because contralateral movement is very common in this style of yoga.

It has a purpose: to engage left brain/right brain in ways that break up current neuromuscular patterns, create new neural connections and deepen the student's focus.

What is contralateral movement? It's when you move your right arm and your left foot simultaneously and then switch to left arm right foot. Or some other version of that.

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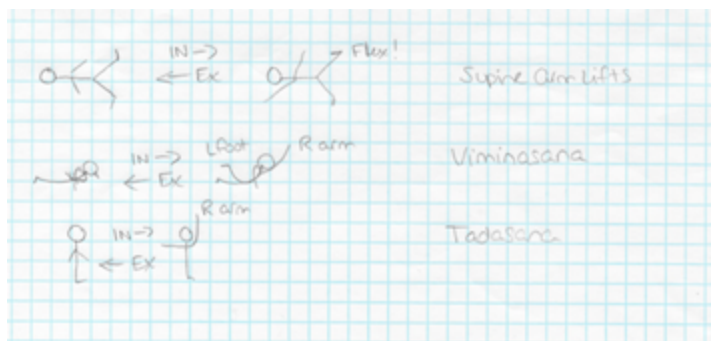
There is no die-hard guideline here. There is only the suggestion that you “pepper” similar contralateral movements throughout a practice to give the student a sense of familiarity. This also gives the class more elegance.

What is the difference between asymmetrical movement and contralateral movement?

Contralateral movement is “exercising muscles on opposite sides of the body”. You can move your right arm and turn your head left. This is contralateral movement. You can abduct your left leg and your right arm at the same time. This is contralateral movement.

A contralateral pose is always asymmetrical but an asymmetrical pose is not always contralateral.

Example: I can hold trikonasana as an asymmetrical pose. It does not become contralateral until I exercise my arm and my head in opposing directions.



Sequencing With Repetition v/s Stay Patterns

Hopefully it is becoming quite clear to you that every detail you add to your class makes a difference in whether or not your goals or intention will be met. It should be very VERY clear that it is the position of Davidson Yoga Therapy that absolutely every detail MUST have a purpose.

The effect of one particular asana can be shifted by changing up the number of reps, if you say at all in the pose, and if you stay for a varying number of breaths. The effect of this pattern asana can be sequenced to intelligently move your students in the desired direction.

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Here are some examples of common repetition/stay patterns. Try these yourself and make notes on the effect each has on your anatomy and especially your physiology - because this is often the foundation of changing the direction of your energy! More on this in the next unit!

Cakravakasana

- 4-6x no stay
- 4x then stay 4 BR
- 4x stay 0BR, 1BR, 2BR, 3BR

There are literally hundreds of ways you can repeat a pose and stay in it. You have recorded many of them by now in your asana section. Think about all the versions of Virabhadrasana 1 we have covered so far. Each has a different effect, yet still maintains the primary, secondary and tertiary purpose of the asana. When you layer different repetition/stay patterns on each of these adaptations, you will change the experience. Try it!

Advice: Go back through the classes you've scribed so far in your teacher training. Experience the repetition/stay patterns that you've scribed from those classes. What effect do they impart? Energy? Calm? Strength? This is your work! Enjoy your explorations!