The S.A.I.L. Class
Mandatory Exercises and Adaptations & Strength and Balance

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Chapter 3B
• All classes have **5** S.A.I.L. components
• Some mandatory exercises
• A mandatory balance component
• Then – the rest is up to you
  and your imagination!
The Components: WABSS

- Warm-up (3-5 mins)
- Aerobics (18-20 mins)
- Balance exercises (Mandatory) (10 mins)
- Strength exercises (Mandatory) (15-18 mins)
- Stretching and education (8-10 mins)
Warm-up (3-5 mins)
Slow pace music: approx 115 bpm*

Examples:

- Marching in place
- Knee lifts
- Side steps L+R
- Heel tap
- Toe tap: front, back and side
- Hamstring curl
- Walk around edge of classroom
- Squats over chair
- Shoulder shrugs
- Shoulder rolls
- Neck exercises

*BPM = Beats per minute
Warm Up - Sitting
Warm up - Standing
Aerobics (18-20 mins)

Faster music – approx 125 bpm

Examples:

- Walk briskly around classroom
- Step-touch: include arms, side swings, reach up, etc...
- Knee raise : touch with elbow
- Step-kick : include arms
- Walking backwards/forwards + arms

*BPM = Beats per minute
The Borg Scale

When exercising, you can rate your:

**Perception of Exertion**

Example: How hard do you think you are working on a scale from 6-20?

- Do not focus on any one factor for example leg pain or shortness of breath.
- Your own feeling of effort and exertion is important, not how it compares to other people’s.
# Borg Scale of Perceived Exertion

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Description</th>
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<tbody>
<tr>
<td>6</td>
<td>No exertion at all</td>
<td>9. For a healthy person, it is like walking slowly, at your own pace, for some minutes</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Extremely light</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Very light</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Light</td>
<td>13. Somewhat hard, but still feels OK to continue.</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Somewhat hard</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Hard (heavy)</td>
<td>17. Very strenuous – you can continue but you have to really push yourself.</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Very hard</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>19. The most strenuous exercise you have ever done.</td>
</tr>
<tr>
<td>19</td>
<td>Extremely hard</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Maximal exertion</td>
<td></td>
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</table>
Talk Test

Ask each of your participants to say their name out loud during aerobic exercises, or “what did you have for breakfast?” etc

“If you can’t talk while you’re exercising, the exercise is too difficult. If you can sing, it’s too easy!” Ask simple questions like: “What did you have for breakfast today?” or “What is your favorite color?”
Balance exercises (10 mins)

*MANDATORY*

Music – approx 115 bpm

**Dynamic Balance**

1. Walk slowly with head turns
2. Walking and stepping over “obstacles”
3. Heel-to-toe walk, forwards and backwards
4. Turn small circle in each direction (by chair)
5. Sit-to-stand for 30 seconds

*BPM = Beats per minute*
Heel-toe Walk
Figure 1

Sit-to-Stand
Figure 2 & 3
Balance exercises (10 mins)  
*MANDATORY*

**Static Balance**

1. Clock sway (feet close together)  
2. Head turns and/or trunk turns  
3. Heel-to-toe stand (hold 15 to 30 seconds)  
4. Reaches (forwards, sideways, etc)  
5. Single-leg stance
Clock Sway
Reaches

Single Leg Stance
Additional exercises using a ball:

- Throw and catch standing still
- Throw and catch walking up and down
- Bounce standing still
- Bounce against wall
- Bounce standing on one leg
- Bounce walking around the circle
Strength exercises (15-18 mins)
*MANDATORY*
Music – approx 120 bpm

Guidelines

- Start with no weights – allows muscle tissues to adapt to new movements
- Then use minimum weight – too much too soon can lead to injury
- 2 sets of 8-10 reps, with a short rest between sets
- SLOWLY! 3 secs to lift/push, hold position for 1 second, 3 secs to lower

*BPM = Beats per minute*
Guidelines, continued

- Should feel hard/very hard (15-17 Borg)
- Too heavy: cannot do 8 reps
- Too light: can do 15 easily

**PARTICIPANTS SHOULD NEVER HOLD THEIR BREATH!**

Breathe out with effort eg lift, push... Breathe in as you relax

- All movements should be smooth and steady
Note:

- **Normal**: muscle soreness and slight fatigue
- **Abnormal**: exhaustion, sore joints, unpleasant muscle pulling

There should be **NO PAIN** during exercise.
Progression and Adaptation

- Allow the first few sessions to feel easy
- Increasing the amount of weight is necessary for increasing strength
- When 10-15 reps is easy, it’s time to increase the weight
- Increase weight in approximately 10% increments
Exercise Adaptations

What do we mean?

Participants who are unable to stand in order to take part in the class can participate while sitting.

- Mostly arm movements, but can also move their feet in varying directions.

Goal: progress to standing version

*We have adapted some mandatory exercises to be done while sitting.
When will you decide that a participant needs to use adapted exercises?

1. On initial assessment
2. Performance during class
3. Temporary change in status

Specific co-morbidities:

- Diabetes
- Osteoporosis
- Glaucoma
- Balance/mobility deficits
Other reasons for participants to use adapted exercises:

- History of falls/fear of falling
- Unable to get out of chair without use of arms
- Poor performance on Timed Up and Go (takes longer than 15 seconds)
- Uses walker or other assistive device
- Pain which restricts activity levels
Strength exercises – Upper Body

*MANDATORY*

1. Biceps curl
2. Triceps extension
3. Arm raise to side
4. Shoulder flexion
5. Overhead press
6. Seated crunches (this is the only exercise that has to be done seated, otherwise participants can choose which way they prefer).
Bicep Curl  Triceps Extension
Side arm raise   Shoulder flexion
Overhead Press
Seated Crunches
Bicep Curl
Strength Exercises – Lower Body

*MANDATORY*

1. Knee extension
2. Knee flexion
3. Hip flexion
4. Hip extension
5. Side-leg raise
6. Plantar flexion (toe stand)
Knee Extension

Sitting vs. Standing
Knee Flexion
Sitting vs. Standing
Hip Flexion

Sitting vs. Standing
Hip Extension
Sitting vs. Standing
Side Leg Raise

Sitting vs. Standing
Toe Stand/Calf Raise

Sitting vs. Standing
Other Strength Training Examples

Wall push-ups

Upright row
Squat over chair

Lunges
Stretching and Education

- Loss of function and increased fall risk in adults over the age of 70 are directly related to decreased flexibility in the shoulders, the neck and the spine.
- Flexibility exercises increase range of movement in participants suffering from musculoskeletal and neuromuscular diseases.
- Regular gentle stretching helps to decrease chronic pain.
- The list goes on.... Stretching is KEY to independence!
Stretching and Education (8-10 mins)

*MANDATORY*

Upper Body

Neck:

- side-to-side
- flexion+extension
Scratch between Shoulder Blades

From Above

From Below
Clasp In front

Clasp Behind
Scapular Retraction
“Praying”  “Fist and Fling”
Quadriceps
Hamstrings
Inner Thigh
Calves
Stretching and Education

Don’t forget to include an education piece during the stretches: one bullet point from the SAIL Guide

Other educational material may be shared if it is from a reliable source (.gov, .edu, .org)
THANK YOU