Introduction
One of the most common factors which increase a teacher's risk of developing vocal problems is using the voice in potentially harmful ways. These potentially harmful vocal habits are commonly referred to as vocal misuse.

Vocal misuse can result in structural changes on the vocal folds causing swelling, inflammation, vocal nodules, and/or polyps. These structural changes come about because the mechanical impact of the vocal folds as they contact each other during strained or forceful voice production or coughing and throat clearing leads to damage to the mucosal cover of the vocal folds.

Vocal misuse does not always result in observable damage to the vocal folds, however. In many cases, even though the vocal folds look normal, vocal misuse will cause the vocal folds to vibrate in an abnormal manner so that the voice sounds impaired or so that the throat feels uncomfortable during speaking.

What constitutes vocal misuse?
The most common vocal misuse behaviours are:
- Speaking or singing with excess loudness levels
- Speaking or singing with excessively low or high pitch levels
- Speaking or singing with excessive muscle tension in the larynx, throat, jaw, tongue and neck
- Speaking with hard glottal attacks - abrupt and forceful beginnings to the first sounds in words
- Crying, laughing and sneezing with excessive muscle tension in the larynx, throat, jaw, tongue and neck
- Shouting, yelling, and screaming
- Coughing or clearing the throat excessively
- Speaking or singing extensively or loudly during a throat infection
- Producing voice during effort closure of the vocal folds in non-speaking activities (e.g. weight lifting, serving in tennis)
- Whispering or speaking in an excessively breathy or airy voice

Whether or not these behaviours will lead to voice problems depends on the frequency and severity of the vocal misuse. Occasional gentle throat clearing, for example, is unlikely to lead to vocal problems. Frequent throat clearing in a forceful way, however, is likely to damage the mucosal cover of the vocal folds. It is also important to keep in mind that individuals vary widely in their susceptibility to vocal misuse. A vocal behaviour that causes a voice problem in one person may have little or no adverse affect on another. We are all aware of people who appear to be able to use potentially harmful vocal habits such as yelling and shouting without developing any vocal impairment!

There are many situations faced regularly by teachers that are conducive to these vocal misuse behaviours. Some frequent examples of such situations are:
- Speaking or singing over background noise
- Speaking loudly to attract student's attention or to discipline students
- Speaking over large distances without effective amplification
- Speaking to large groups without effective amplification
- Speaking in an unnatural pitch or voice quality when reading to students or directing plays
- Singing in a style or vocal range which is appropriate for the student but uncomfortable for the teacher
- Cheering or barracking at sporting events

Strategies for minimising vocal misuse
An obvious way to minimise vocal misuse is simply to avoid using any of the vocal habits listed below.
- Never talk or sing loudly
- Never clear your throat
- Never yell or shout
- Never teach when you have a throat infection
- Never use character voices
- Never start words (spoken or sung) in a tense, hard way
- Never speak over large distances or in noisy situations without a good amplifier

Avoiding all of these potentially harmful vocal behaviours is, however, far easier said than done! For this reason, we have listed below a variety of additional strategies that will help you minimise vocal misuse behaviours and/or reduce their harmful effects.
Reducing vocal misuse
Rather than trying to make your voice louder, clearly articulate, open your mouth widely when you speak, slow your speech down a little and ensure that students can see your face easily.

• Stand in a place in the classroom that makes it easiest for students to hear you
• Move closer to students or have them move closer to you when talking to them
• Arrange furniture to promote short-distance conversations
• Arrange the classroom so those students who are likely to be noisy or need extra attention are at the front
• Use methods of behaviour management which don’t involve yelling or loud talking
• Turn down background noise such as radios, television, PA systems, or move away from the source of noise when talking
• Close doors and windows to shut out external noise sources
• Focus on how your voice is feeling rather than trying to hear it above the noise (ie feelings of throat fatigue, dryness, soreness, or strain are danger signals)
• Use nonverbal means to gain attention and convey some of your message - use hand and arm gestures or sound signals such as clapping or a bell/whistle/children’s party clicker
• Use pauses and variations in intonation (inflection) rather than loudness to gain attention and increase the responsiveness of students
• Talk to groups or classes mainly when students are quiet

• Give instructions to a small number of students who then have responsibility for informing the rest of the class
• Use routines such as playing a particular piece of music to signal changes in activities
• Use an amplifier or megaphone where possible and ensure that you understand good microphone technique
• Whenever you feel that you need to cough or clear your throat, swallow hard, yawn, take a sip of water, suck or chew a sweet but avoid medicated throat lozenges, or push air up from your lungs in short, quiet bursts
• Increase your awareness of when you clear your throat and cough - count the number of times you do these things in, say, a period of an hour and then set yourself a target of reducing the number in the next hour
• Restrict the amount of speaking, avoid all forms of loud or strained speaking and don’t whisper when you have a throat infection - avoid all but essential talking and, preferably, do not teach classes
• Avoid whispering or using a very breathy voice to protect your voice

Reducing the harmful effects of vocal misuse
• Sip water frequently all day to keep your larynx and vocal tract moist (one to two litres of water sipped during the day is sufficient)
• Massage under the chin to increase saliva flow and keep the larynx and vocal tract moist
• Have steam inhalations (no additives needed) to clear mucus and keep the vocal tract lubricated (once or twice a day for one minute is ample)
• Plan balanced voice use during a day by organising activities where speaking is not involved - listening to music, tapes, videos and DVDs in classes
• Include a period of at least 30 minutes during the teaching day where you can work or relax in a quiet place without talking at all
• Use effective and efficient voice production techniques (refer to the Using Effective Voice Techniques information sheet for recommended breathing, posture, vocal fold vibration, and voice projection strategies)