Voice Injury in Teachers: How to Minimise Occupational Risk

Authors:  Cecilia Pemberton Speech Pathologist. Voice Care Australia, NSW  
Associate Professor Jennifer Oates, Latrobe University, Vic  
Dr Alison Russell, Children, Youth and Women’s Health Service, SA

This submission deals with voice injury in teachers:

- Teachers, particularly women, are more likely to experience voice problems than any other sector of the general population;

- The consequences of voice injury in teachers are manifold but can be principally measured through absenteeism, which costs the education department many millions of dollars annually;

- The solution to the problem is prevention, by providing information through professional development using programmes such as the Voice Care for Teachers package.

This submission addresses the following parts of the terms of reference:

1. High quality teaching expertise;

2. Innovative initiatives;

3. Gender issues.
THE PROBLEM

Research, in Australia and throughout the world, shows that up to 20% of teachers experience voice problems each year.\(^1\)\(^,\)\(^2\) Teachers are between three and five times more likely to experience voice problems than the general population\(^1\)\(^,\)\(^3\) and are a staggeringly 32 times more likely to report voice problems than the general population\(^2\).

There is also strong evidence that the representation of teachers among referrals for voice therapy is disproportionate to their representation in the workforce. Studies have been conducted

- in the USA where the teachers represented 20% of voice referrals but only 4% of the workforce\(^4\),
- in Europe where teachers represented 16% of voice referrals but only 6% of the workforce\(^5\) and
- in the UK where teachers represented 15% of voice referrals but only 2% of the workforce\(^6\)

Female teachers are at least twice as likely as male teachers to report voice problems or symptoms.\(^1\)\(^,\)\(^2\) The prevalence of voice problems in music teachers, physical education teachers, language teachers and preschool and primary school teachers seems to be most commonly reported.\(^5\)\(^,\)\(^2\)\(^,\)\(^7\)\(^,\)\(^8\) There is also evidence\(^9\) that many teachers tolerate voice problems. Because they are not aware of how and where to seek help, this may exacerbate the extent of the voice injury and as a consequence increase the time and cost of treatment. A recent report from France indicates that 20% of the sick leave taken by teachers is due to voice problems while in the general population it constitutes 4% of sick leave\(^10\).

THE CONSEQUENCES

The cost of days lost due to voice problems is significant in Australia and throughout the world. In a 1999 survey of teachers in South Australia, Russell\(^11\) reported that teachers, on average, take 0.7 days of sick leave per year due to voice problems. A decade later, this number has doubled with teachers in the CCI project\(^21\) averaging 0.9 days of sick leave in a 6-month period. The monetary value of the problem can be calculated by reference to the number of teachers and the cost of their absenteeism. Thus, for example, the Australian Bureau of Statistics reports there are 70,342 teachers in Victoria\(^23\). Using the replacement teacher cost of $250 per day, and a conservative estimate of one-day sick leave per teacher per year due to voice injury, this equates to a cost to the education system in Victoria of $17,585,500 per annum. This does not take into account the medical and therapy costs associated with voice injury. Empirical evidence suggests, furthermore, that teachers are reluctant to report voice injury through the workers compensation system for fear of being labelled or victimised, and as a consequence employers underestimate the cost to the system of voice injury.

There are other significant but hidden costs of voice problems. Researchers report that even a mildly hoarse voice can have a significant impact on student learning\(^12\)\(^,\)\(^13\). There is also evidence that teachers are less effective if they have a problem with their voice\(^2\)\(^,\)\(^14\)\(^,\)\(^24\) and have more difficulty with disciplining students if they have voice problems\(^15\). Further, it is
recognised that voice problems interfere with job performance\textsuperscript{24} and job satisfaction\textsuperscript{24}, and as previously noted, result in absenteeism\textsuperscript{2, 14}. Voice problems can cause loss of trained staff as teachers leave the profession, some through medical retirement but many to take employment in less vocally strenuous occupations\textsuperscript{9}. Not only do the voice problems at work affect the working life of a teacher, but as reported by Smolander and Huttunen\textsuperscript{15}, teachers report that their social and family life is restricted.

THE SOLUTION

The most common voice injuries seen in teachers relate to vocal load or “phonotrauma”\textsuperscript{16} which can be minimised or prevented with appropriate training. There is mounting evidence that voice care education and voice training can have a positive impact on preventing voice problems\textsuperscript{17, 18, 19} and considerable savings could be achieved through prevention and early intervention for voice problems in teachers. Such programs should be adopted throughout schools as an annual part of Occupational Health and Safety programmes. Just as manual handling has become an annual OH&S requirement so too voice injury/voice incidents require the same model for prevention. By providing voice care information, the employers would satisfy the legislative requirements that “systems of work and the working environment of the employees are safe and without risks to health”.

In 2008 Catholic Education in NSW has adopted an innovative model of voice injury prevention using the Voice Care for Teachers package. The programme was supported by funding from Catholic Church Insurance (CCI).

The Voice Care for Teachers package (DVD, posters and bookmarks) has been evaluated in the CCI Voice Care Project,\textsuperscript{21}. This study has demonstrated that teachers significantly improved their knowledge of the causes of voice problems and awareness of factors that prevent voice injury, and importantly, reduced vocal misuse behaviours following the introduction of the Voice Care for Teachers Package.

The Voice care for Teachers DVD can be shown as part of a staff meeting making it time effective and accessible for 100\% of teachers. It can be delivered in one forum or with appropriate approval through an intranet facility. For those teachers wishing further voice care information, the DVD has practical advice that can reduce the vocal load and risk that teachers are exposed to every day. These segments can be viewed as stand alone packages or can be incorporated into a comprehensive OH&S programme. Included are:

- Classroom management strategies
- Managing classroom acoustics
- Voice care techniques
- How and when to seek help
- What voice therapy entails
- Types of voice problems experienced by teachers

Every teacher in the school can download the .pdf booklet which includes all of the information in the voice care information from the main section of the DVD plus all of the voice care techniques and voice symptom and risk charts. This information will assist a teacher in regularly reviewing their voice and assessing it for both load and risk.
SUMMARY

20% of teachers experience voice problems. The majority of teachers’ voice problems should be preventable if teachers are provided with the right information. Voice care should become a primary focus of professional development for teachers.

A model for prevention should include:

- Comprehensive OH&S Policy including a voice injury risk assessment tool
- Access for all teachers to information about voice care and voice injury (eg Voice Care for Teachers package)
- Comprehensive voice care programme in all schools
- Voice Care Workshops for:
  - Student teachers
  - Beginning teachers & returning teachers
  - Any teacher wishing to participate in voice training

If you would like further information about any aspect of this paper please contact Cecilia Pemberton (phone: 0412442617 or email: info@voicecareaustralia.com.au) or Jenni Oates (phone: 03 9479 1810 or email: j.oates@latrobe.edu.au)
References


23. Australian Bureau of Statistics
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