

1 **RESOLUTION RECOGNIZING RESOURCEFUL**
2 **USE OF TECHNOLOGY IN THE CLASSROOM**

3 2003 GENERAL SESSION

4 STATE OF UTAH

5 **Sponsor: Gregory H. Hughes**

6 **A concurrent resolution of the Legislature and the Governor recognizing audio**
7 **enhancement technology as an important tool that can increase the quality of education**
8 **in the state of Utah.**

9 *Be it resolved by the Legislature of the state of Utah, the Governor concurring therein:*

10 WHEREAS, the ability of students to learn centers on how effectively their brains
11 receive the incoming signal or information from the teacher;

12 WHEREAS, for spoken instruction to be worthwhile, students must actually hear and
13 listen to words;

14 WHEREAS, because children's brains are in the process of developing, they listen
15 differently from adults and require a quieter environment and louder signal in order to learn;

16 WHEREAS, children's auditory neurological network is not fully developed until the
17 age of 15;

18 WHEREAS, poor acoustics can interfere with the student's development of spoken
19 language, reading and writing skills, and academic performance;

20 WHEREAS, children do not have the years of listening and life experience that adults
21 have acquired and have difficulty performing the automatic auditory-cognitive closure of
22 missed information in the way that adults do;

23 WHEREAS, if students cannot focus on the spoken word of the teacher, students not
24 only lose the desire to learn but also the ability;

25 WHEREAS, audio enhancement has been shown to dramatically improve student
26 achievement and student test scores;

27 WHEREAS, audio enhancement in the classroom gives "front row advantage" to each



28 student in the classroom and creates an emotionally secure, heightened learning environment;

29 WHEREAS, audio enhancement in the classroom provides a way to strengthen auditory
30 signals through clearer sound and volume;

31 WHEREAS, ~~h [infrared,] h~~ wireless microphones allow a teacher's voice to be disseminated
32 throughout the classroom **h WHILE ALLOWING A TEACHER TO FREELY MOVE ABOUT THE**
32a **CLASSROOM h** ;

33 WHEREAS, use of sound enhancement greatly reduces teacher absenteeism, teacher
34 vocal strain, and teaching fatigue;

35 WHEREAS, students can reach more of their potential sensory development and
36 achieve higher academic standings;

37 WHEREAS, scientific evidence from other states attests to the success of audio
38 enhancement in improving student academic achievement and test scores;

39 WHEREAS, studies show that audio enhancement improves word discrimination skills
40 and the ability to focus on the teacher's spoken word with improved comprehension regardless
41 of the distance between the teacher and the students;

42 WHEREAS, studies also demonstrate academic performance improvements in grade
43 school students who had academic delays, improved performance on word identification tasks,
44 and significant improvement in spelling performance;

45 WHEREAS, an "at-risk" school study at Pioneer Elementary School in the Granite
46 School District, conducted prior to implementing audio enhancement into its classrooms,
47 reported three years of declines in SAT scores in reading, math, language, and total test battery;

48 WHEREAS, the audio enhancement equipment was installed in the school without
49 changing teacher assignments and curriculum instruction;

50 WHEREAS, 2001, the first year with the new equipment, showed 10 to 15% gains over
51 the previous year as measured by SAT scores;

52 WHEREAS, 2002 showed the same significant gains;

53 WHEREAS, the school had a large English as Second Language student population,
54 and the greatest student gains came from these students with an average gain of 16%, as
55 measured by Utah's Criterion Reference Tests;

56 WHEREAS, Dr. Paul McCarty, principal of Pioneer Elementary School, has made
57 resourceful use of audio enhancement at the school and Barry Newbold, superintendent of
58 Jordan School District, has directed that all future school buildings in the district be built to

59 accommodate audio enhancement technology; and

60 WHEREAS, audio enhancement can be a key factor in efforts to increase the quality of
61 education throughout the state of Utah:

62 NOW, THEREFORE, BE IT RESOLVED that the Legislature of the state of Utah, the
63 Governor concurring therein, recognizes audio enhancement technology as a research-proven
64 method and an important tool that can increase student academic achievement and student test
65 scores, as well as increasing the quality of education in the state of Utah.

66 BE IT FURTHER RESOLVED that a copy of this resolution be sent to Dr. Paul
67 McCarty.

Legislative Review Note
as of 1-2-03 11:53 AM

A limited legal review of this legislation raises no obvious constitutional or statutory concerns.

Office of Legislative Research and General Counsel

Fiscal Note
Bill Number HCR002

**Resolution Recognizing Resourceful Use of Technology in the
Classroom**

18-Jan-03
3:47 PM

State Impact

Provisions of this resolution can be implemented within existing budgets.

Individual and Business Impact

No fiscal impact.

Office of the Legislative Fiscal Analyst