Computer program on laptop computer, answer booklet

## Questions / instructions:

This activity uses the computer.
[Problems were presented on a computer screen, with sound track, at four-second intervals. Students responded in answer booklets that showed each problem and had a blank for entering the response.]

|  | Linked to 2005 \& 200 <br> \% response 2009 ('05) ['01] |  |  |  | Linked to 2005 \& 2001 \% response 2009 ('05) ['01] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $4 \times 7=28$ | 34 (37) [47] | 81 (82) [92] |  | $4 \times 8=32$ | 22 (22) [30] | 76 (78) [86] |
| $9 \times 1=9$ | 79 (84) [85] | 98 (98) [99] |  | $0 \times 1=0$ | 64 (65) [68] | 90 (94) [93] |
| $3 \times 9=27$ | 38 (36) [55] | 85 (88) [90] |  | $9 \times 2=18$ | 67 (62) [70] | 96 (95) [97] |
| $6 \times 4=24$ | 29 (35) [45] | 83 (83) [91] |  | $7 \times 5=35$ | 45 (48) [61] | 93 (90) [95] |
| $9 \times 8=72$ | 23 (21) [28] | 78 (77) [84] |  | $3 \times 6=18$ | 35 (35) [52] | 89 (87) [93] |
| $0 \times 7=0$ | 69 (71)[73] | 93 (94) [92] |  | $5 \times 2=10$ | 75 (76) [80] | 99 (96) [98] |
| $8 \times 7=56$ | 15 (11) [20] | 65 (65) [77] |  | $8 \times 6=48$ | 11 (11) [19] | 65 (66) [76] |
| $3 \times 5=15$ | 70 (76) [77] | 97 (97) [98] |  | $2 \times 1=2$ | 80 (82) [84] | 96 (96) [97] |
| $6 \times 9=54$ | 21 (17) [26] | 76 (76) [79] |  | $7 \times 0=0$ | 70 (62) [65] | 91 (89) [93] |
| $2 \times 4=8$ | 78 (80) [81] | 97 (96) [98] |  | $9 \times 9=81$ | 34 (34) [36] | 88 (87) [90] |
| $8 \times 8=64$ | 17 (15) [22] | 69 (69) [79] |  | $9 \times 3=27$ | 32 (26) [45] | 84 (84) [90] |
| $5 \times 5=25$ | 71 (72) [78] | 95 (95) [98] |  | $1 \times 6=6$ | 80 (82) [82] | 99 (98) [99] |
| $0 \times 0=0$ | 95 (94) [92] | 99 (99) [100] |  | $4 \times 4=16$ | 39 (39) [57] | 90 (87) [94] |
| $7 \times 3=21$ | 42 (42) [55] | 89 (89) [94] |  | $1 \times 8=8$ | 78 (81) [83] | 99 (98) [99] |
| $6 \times 7=42$ | 16 (14) [24] | 71 (73) [79] |  | $9 \times 4=36$ | 24 (23) [37] | 81 (81) [88] |
|  |  |  | Total Score: | 30 | 4 (2) [7] | 37 (41) [47] |
|  |  |  |  | 27-29 | 5 (7) [10] | 29 (26) [30] |
|  |  |  |  | 21-26 | 14 (14) [18] | 20 (18) [15] |
|  |  |  |  | 15-20 | 24 (23) [25] | 8 (9) [5] |
|  |  |  |  | 0-14 | 53 (54) [40] | 6 (6) [3] |

## Subgroup Andlyses:



## Commentary:

This task, focusing on knowledge of basic facts, was used previously in both 2001 and 2005. Both at year 4 and year 8 levels, there was very little change in performance from 2005 to 2009, which means that the drop in performance from 2001 to 2005 has been maintained in 2009. That drop is particularly evident where the multiplication involves digits other than 0, 1, 2 and 5 . Year 4 boys scored significantly higher than year 4 girls, but there was a small opposite trend at year 8 level.

