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| Data  **Chart of Periods**  Table #1 : Class Period and Teachers  Teacher/Period 2 3 4 5 6  Blanton ÷ ÷  Bull ÷  Campbell ÷ (E)÷  Cohn ÷ ÷ ÷ ÷  Elewski ÷  Ladd ÷ ÷ ÷  **(E)=experimental**  The data was categorized by the correctness of the answer and the confidence of the individual. There was not many cases of significant differences, however in a few cases there was significant differences between the two genders, although it was different from what we first predicted.  **Chi-Squared: Right and Knew the Answer**  MTB > chis C11, C12  Expected counts are printed below observed counts  mrat frat Total  1 62 31 93  58.11 34.89  2 35 33 68  42.49 25.51  3 40 20 60  37.49 22.51  4 10 2 12  7.50 4.50  5 6 4 10  6.25 3.75  6 39 14 53  33.12 19.88  7 44 12 56  34.99 21.01  8 12 3 15  9.37 5.63  9 20 8 28  17.50 10.50  10 50 47 97  60.61 36.39  11 34 18 52  32.49 19.51  12 37 36 73  45.61 27.39  13 25 17 42  26.24 15.76  14 7 4 11  6.87 4.13  15 7 3 10  6.25 3.75  16 9 3 12  7.50 4.50  17 9 4 13  8.12 4.88  18 4 2 6  3.75 2.25  19 17 6 23  14.37 8.63  20 61 50 111  69.36 41.64  Total 528 317 845  ChiSq = 0.260 + 0.433 +  1.320 + 2.199 +  0.168 + 0.280 +  0.835 + 1.390 +  0.010 + 0.016 +  1.045 + 1.741 +  2.319 + 3.863 +  0.736 + 1.227 +  0.358 + 0.597 +  1.858 + 3.094 +  0.070 + 0.117 +  1.627 + 2.710 +  0.059 + 0.098 +  0.002 + 0.004 +  0.090 + 0.151 +  0.301 + 0.501 +  0.095 + 0.158 +  0.017 + 0.028 +  0.481 + 0.801 +  1.007 + 1.678 = 33.742  df = 19  8 cells with expected counts less than 5.0  p-value=.0197  Assuming that the actual difference between the likelihood of obtaining an answer right and being confident of the two sexes is zero we would only obtain a sample with a difference as extreme as this 1.97% of the time. Therefore there is some evidence to support that there is an actual difference between the obtaining a right answer and being confident and being female or male.  **Chi-Squared: Right and Educated Guess**  MTB > chis C11,c12  Expected counts are printed below observed counts  mrbt frbt Total  1 45 65 110  50.70 59.30  2 23 26 49  22.58 26.42  3 55 46 101  46.55 54.45  4 21 16 37  17.05 19.95  5 21 22 43  19.82 23.18  6 31 36 67  30.88 36.12  7 22 27 49  22.58 26.42  8 6 10 16  7.37 8.63  9 17 15 32  14.75 17.25  10 17 21 38  17.51 20.49  11 18 19 37  17.05 19.95  12 19 30 49  22.58 26.42  13 14 28 42  19.36 22.64  14 11 8 19  8.76 10.24  15 15 15 30  13.83 16.17  16 31 22 53  24.43 28.57  17 3 3 6  2.77 3.23  18 18 26 44  20.28 23.72  19 21 21 42  19.36 22.64  20 16 40 56  25.81 30.19  Total 424 496 920  ChiSq = 0.640 + 0.547 +  0.008 + 0.007 +  1.535 + 1.312 +  0.914 + 0.781 +  0.071 + 0.060 +  0.000 + 0.000 +  0.015 + 0.013 +  0.256 + 0.219 +  0.344 + 0.294 +  0.015 + 0.013 +  0.053 + 0.045 +  0.568 + 0.486 +  1.482 + 1.267 +  0.575 + 0.491 +  0.100 + 0.085 +  1.769 + 1.512 +  0.020 + 0.017 +  0.256 + 0.219 +  0.140 + 0.119 +  3.728 + 3.187 = 23.163  df = 19  2 cells with expected counts less than 5.0  P-value=.2302493978  Assuming that the actual difference between the likelihood of obtaining an answer right and having an educated guess of the two sexes is zero we would only obtain a sample with a difference as extreme as this 23% of the time. Therefore there is not sufficient evidence to disprove the equal likelihood of both sexes to obtain an answer right and with an educated guess.  **Chi-Squared : Right and Guessed**  MTB > chis C11,C12  Expected counts are printed below observed counts  mrct frct Total  1 20 35 55  24.83 30.17  2 22 20 42  18.96 23.04  3 36 50 86  38.83 47.17  4 27 34 61  27.54 33.46  5 13 15 28  12.64 15.36  6 15 18 33  14.90 18.10  7 32 32 64  28.90 35.10  8 19 13 32  14.45 17.55  9 31 29 60  27.09 32.91  10 6 8 14  6.32 7.68  11 19 26 45  20.32 24.68  12 12 12 24  10.84 13.16  13 16 23 39  17.61 21.39  14 39 31 70  31.61 38.39  15 22 39 61  27.54 33.46  16 10 23 33  14.90 18.10  17 4 12 16  7.22 8.78  18 32 28 60  27.09 32.91  19 19 30 49  22.12 26.88  20 11 14 25  11.29 13.71  Total 405 492 897  ChiSq = 0.941 + 0.774 +  0.486 + 0.400 +  0.206 + 0.170 +  0.011 + 0.009 +  0.010 + 0.008 +  0.001 + 0.001 +  0.333 + 0.274 +  1.434 + 1.180 +  0.564 + 0.464 +  0.016 + 0.013 +  0.085 + 0.070 +  0.125 + 0.103 +  0.147 + 0.121 +  1.730 + 1.424 +  1.115 + 0.918 +  1.611 + 1.326 +  1.439 + 1.184 +  0.890 + 0.732 +  0.441 + 0.363 +  0.007 + 0.006 = 21.137  df = 19  P-value=.3292955673  Assuming that the actual difference between the likelihood of obtaining an answer right and guessing of the two sexes is zero we would only obtain a sample with a difference as extreme as this 33% of the time. Therefore there is not sufficient evidence to disprove the equal likelihood of both sexes to obtain an answer right and with a guess.  **Chi-Squared : Wrong but Confident**  MTB > chis C11,C12  Expected counts are printed below observed counts  mwat fwat Total  1 7 1 8  5.04 2.96  2 10 9 19  11.96 7.04  3 1 2 3  1.89 1.11  4 8 2 10  6.29 3.71  5 24 7 31  19.51 11.49  6 17 15 32  20.14 11.86  7 4 1 5  3.15 1.85  8 11 8 19  11.96 7.04  9 11 9 20  12.59 7.41  10 36 34 70  44.06 25.94  11 9 5 14  8.81 5.19  12 24 11 35  22.03 12.97  13 27 26 53  33.36 19.64  14 5 2 7  4.41 2.59  15 18 11 29  18.25 10.75  16 34 16 50  31.47 18.53  17 12 2 14  8.81 5.19  18 10 2 12  7.55 4.45  19 27 14 41  25.81 15.19  20 21 9 30  18.88 11.12  Total 316 186 502  ChiSq = 0.766 + 1.302 +  0.321 + 0.546 +  0.418 + 0.710 +  0.462 + 0.785 +  1.031 + 1.752 +  0.491 + 0.833 +  0.231 + 0.392 +  0.077 + 0.131 +  0.201 + 0.341 +  1.476 + 2.507 +  0.004 + 0.007 +  0.176 + 0.299 +  1.213 + 2.061 +  0.080 + 0.136 +  0.004 + 0.006 +  0.203 + 0.344 +  1.153 + 1.958 +  0.792 + 1.346 +  0.055 + 0.093 +  0.237 + 0.403 = 25.342  df = 19  9 cells with expected counts less than 5.0  P-value= .1495788791  Assuming that the actual difference between the likelihood of obtaining an answer wrong and being confident of the two sexes is zero we would only obtain a sample with a difference as extreme as this 15% of the time. Therefore there is not sufficient evidence to disprove the equal likelihood of both sexes to obtain an answer wrong with confidence.  Table: Wrong but Educated Guess  Chi-Squared: Wrong but Educated Guess  MTB > chisC11,C12  Expected counts are printed below observed counts  mwbt fwbt Total  1 10 8 18  9.23 8.77  2 17 16 33  16.92 16.08  3 7 11 18  9.23 8.77  4 30 32 62  31.79 30.21  5 54 53 107  54.86 52.14  6 34 43 77  39.48 37.52  7 15 13 28  14.35 13.65  8 34 25 59  30.25 28.75  9 32 44 76  38.96 37.04  10 35 38 73  37.42 35.58  11 20 23 43  22.04 20.96  12 40 29 69  35.37 33.63  13 37 33 70  35.89 34.11  14 24 8 32  16.41 15.59  15 40 33 73  37.42 35.58  16 48 53 101  51.78 49.22  17 36 31 67  34.35 32.65  18 29 22 51  26.15 24.85  19 39 40 79  40.50 38.50  20 26 22 48  24.61 23.39  Total 607 577 1184  ChiSq = 0.065 + 0.068 +  0.000 + 0.000 +  0.538 + 0.566 +  0.100 + 0.106 +  0.013 + 0.014 +  0.759 + 0.799 +  0.029 + 0.031 +  0.466 + 0.490 +  1.244 + 1.309 +  0.157 + 0.165 +  0.190 + 0.200 +  0.605 + 0.636 +  0.035 + 0.036 +  3.516 + 3.699 +  0.177 + 0.186 +  0.276 + 0.290 +  0.079 + 0.084 +  0.312 + 0.328 +  0.056 + 0.059 +  0.079 + 0.083 = 17.842  df = 19  P-value=.53295  Assuming that the actual difference between the likelihood of obtaining an answer wrong and guessing of the two sexes is zero we would only obtain a sample with a difference as extreme as this 53.3% of the time. Therefore there is not sufficient evidence to disprove the equal likelihood of both sexes to obtain an answer right and by guessing.  **Chi-Squared: Wrong and Guessed**  MTB > chis C11, C12  Expected counts are printed below observed counts  mwct fwct Total  1 22 16 38  17.56 20.44  2 54 54 108  49.89 58.11  3 24 26 50  23.10 26.90  4 64 71 135  62.37 72.63  5 45 53 98  45.27 52.73  6 22 33 55  25.41 29.59  7 47 84 131  60.52 70.48  8 71 110 181  83.62 97.38  9 51 49 100  46.20 53.80  10 14 12 26  12.01 13.99  11 61 65 126  58.21 67.79  12 34 31 65  30.03 34.97  13 43 31 74  34.19 39.81  14 73 110 183  84.54 98.46  15 60 53 113  52.20 60.80  16 25 41 66  30.49 35.51  17 108 107 215  99.33 115.67  18 69 77 146  67.45 78.55  19 35 55 90  41.58 48.42  20 26 26 52  24.02 27.98  Total 948 1104 2052  ChiSq = 1.125 + 0.966 +  0.338 + 0.290 +  0.035 + 0.030 +  0.043 + 0.037 +  0.002 + 0.001 +  0.457 + 0.393 +  3.021 + 2.594 +  1.905 + 1.635 +  0.499 + 0.428 +  0.329 + 0.283 +  0.134 + 0.115 +  0.525 + 0.451 +  2.272 + 1.951 +  1.576 + 1.354 +  1.164 + 1.000 +  0.989 + 0.849 +  0.757 + 0.650 +  0.036 + 0.031 +  1.041 + 0.894 +  0.163 + 0.140 = 30.500  df = 19  P-value=.0457736686  Assuming that the actual difference between the likelihood of obtaining an answer wrong and guessing of the two sexes is zero we would only obtain a sample with a difference as extreme as this 4.587% of the time. Therefore there is some evidence to support that there is an actual difference between the obtaining a wrong answer and guessing and being female or male.  Key  **In the tables, the first letter refers to the gender. The second letter refers to the correctness of the answer(r for right, w for wrong). The third refers to the confidence level (a for knew the answer, b for educated guess, c for guess). The last refers to the class period or the total number of students.**  [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)[[Acknowledgement](http://docs.google.com/acknowledgement.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Recommendation](http://docs.google.com/recommendation.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2002 Projects](http://docs.google.com/AP2002/index.html)][[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |