CHANGING STATISTICS EDUCATION MODELS OF MATHEMATICS TEACHER'S EDUCATION FOR THE INTERNET AGE

Kang Sup Lee
Dankook University, Seoul, Korea

Because statistical concepts are important parts in school mathematics, mathematics teachers have trained by special statistics education models. In this study, we overviewed the current system for statistics education and proposed new statistics education model for school mathematics teachers.

SECTION 1 CURRENT SYSTEM

Grade	Contents	Service in pre-teachers
1 2 3 4 5 6	Examining objects by criterions Making tables and graphs Data collection, Bar graph Graph of broken lines, Making various graph Stem-and-leaf display, Mean Pie chart, Band graph	(11 National Universities for Elementary School Teachers) **Probability and Statistics** Descriptive statistics, Estimation, Test
7 8 9	Frequency distribution table, Histogram, Frequency distribution polygon, Mean from frequency distribution table, Relative and cumulative frequency Probability and its properties Scatter plot, Correlation	(31 Department of Mathematics Education in (Private or National) Universities) **Probability and Statistics I** Probability, Independence, Random variables, Distributions (Binomial, Multinomial, Poisson, Gamma, Chi-square, Normal), Random sampling
10 11~12	Measure of dispersion, S.D. Combination, Permutation, Binomial theorem, Conditional prob., Random variable, Expectation, Binomial dist., Normal distribution, Population and sample, Central limit theorem, Confidence interval for mean	**Probability and Statistics II** Law of large numbers, Central limit theorem, Estimation, Testing, Experimental design, Analysis of variance, Regression analysis, Nonparametric method

SECTION 2 PROPOSED MODEL

Exploration and Analysis of Data	**Probability and Statistics I for Mathematics Teacher**	**Probability and Statistics II for Mathematics Teacher**
Study the followings in aspect of school mathematics: Data collection, Graphs, Descriptive statistics, Stem and leaf display, Box plot	Study the followings in aspect of school mathematics: Probability, Random variables, Distribution of sample mean, Inference for means and ratios	Study the followings in aspect of educational field research: Test, Categorical data analysis, Basic experimental design, ANOVA, Simple regression, Basic nonparametric method
Web surfing, Excel, SAS, SPSS, CATS		
Statistical Software for School Mathematics		