Transition to Quantitative Literacy Unit Rubrics
Statistics & Predictions in Everyday Life

Standard	4 - Mastery	3 - Proficient	2 - Basic	1- Below Basic	0 - No Evidence
QL-A1-A Use variables to accurately represent quantities or attributes in a variety of authentic tasks.	A: Analyze authentic tasks to interpret variables and quantities.	A: Create an expression from any authentic task. Including naming the variable.	A: Create an expression from an authentic task- linear. Including naming the variable. A: Match correct expression to given task.	A: Identify parts of an expression. ie term, coefficient, variable. A: Given an authentic task student can identify the variable.	A: Not yet able to apply vocabulary to identify parts of an expression.
QL-A1-B Predict and then confirm the effect that changes in variable values have in an algebraic relationship.	B: Predict and confirm, with support, of changes for a variable.	B: Mathematically confirm predictions to authentic task changes.	B: Predict what changes in an authentic task would do to an expression.	B: Can complete one of the following: either predict or confirm what changes in an authentic task would do to an expression.	B: Not yet able to predict or confirm what changes in an authentic task would do to an expression.
QL-N1-A Demonstrate operation sense and the effects of common operations on numbers in words and symbols. QL-N1-B Apply mathematical properties in numeric and algebraic contexts. QL-N1.C Use different types of mathematical summaries of data, such as mean, median, and mode.	A-C. Use mathematical properties and statistical summaries to justify more advanced concepts.	A-C. Explain mathematical properties and statistical summaries.	A-C. Use mathematical properties and statistical summaries.	A-C. Identify mathematical properties and statistical summaries.	A-C. Not yet able to use or identify mathematical properties or statistical summaries.
QL-N1.D Read, interprets, and makes decisions based upon information from various data displays.	D. Create and use various representations of data.	D. Read and interpret representations of data and use this to make decisions	D. Read and interpret various representations of data.	D. Read various representations of data	D. Read only limited representations.
QL-N3.A Use estimation skills.	A. Justify choice of statistical methods used to create estimates.	A. Use statistical measures of estimation, including, but not limited to normal distribution, confidence intervals, and linear regression.	A. Use statistical measures of estimation, including, but not limited to measures of central tendency and linear regression.	A. Use statistical measures of central tendency to estimate.	A. Not yet able to use estimation skills accurately.
QL-N3.B State convincing evidence to justify estimates.	B. Compare estimations to find the most accurate and/or most reasonable solution.	B. Determine if solution is appropriate in context of the problem and justify.	B. Determine if solution is reasonable in context of the problem.	B. Eliminate unreasonable solutions and estimates.	B. Not yet able to analyze solutions for reasonableness.
QL-FM2.A Translate problems from a variety of contexts into mathematical representations and vice versa.	A. Choose and efficient model to analyze problems in a variety of context.	A. Translate between tables, graphs, equations, and written descriptions in a variety of authentic tasks.	A. Translate between visual representations (tables/graphs), equations, and sometimes written descriptions.	A. Translate between tables and graphs (between two visual representations) and sometimes equation.	A. Not yet able to translate problems into any other form of representation.

QL-FM3.A Identify the reasonableness of a linear model for given data and consider alternative models.	A. Analyze the reasonableness of various models given an authentic task.	A. Identify the reasonableness of a linear model for given data and consider alternative models in an authentic task.	A. Identify the reasonableness of a linear model for given data.	A. Select the correct linear model for a given task.	A. Not yet able to determine the reasonableness of a linear model.