

## **Guidelines for Expert Feedback on the Mathematics TEKS**

Dr. Robert Capraro

Please review the mathematics TEKS for Kindergarten through Grade 12 and respond to the following questions. In your feedback please indicate the specific grade level/course and student expectation number you are referring to, as appropriate.

1. Is a complete and logical development of mathematics concepts followed for each grade level or course?

to 10,000 and 3N05 “represent the comparison of two numbers to 10,000 using the symbols  $>$ ,  $<$ , or  $=$ . “ I think in 3NO4 the use of the term compare requires more than one number. The idea of compare is not a cleanly designed concept like the basic operations of add, subtract, multiply, and divide. So compare can be used to mean all of these plus the relational symbols of  $<$ ,  $>$ , and  $=$ . So it seems to be that 3NO4 and 3NO5 are not really different. 3NO4 cannot be done without at least two numbers and 3NO5 specifies two numbers. So if this is to mean in 3NO4 students can compare 3, 4, 5 or more numbers this is not clear. However, if the distinction between the two is to use operator symbols in the former and relational symbols in the later this should be specified. The 3NO1-3NO5 should be rolled into one objective without regressing below the competency of prior grades.

- b. In grade 4 the focus shifts to representing the numbers between whole numbers. It would be helpful to children to use the same objectives they used for building whole number base-ten ideas as they move to numbers on the other side of the decimal point.



could be. "Determine an equation with graph of a line parallel or perpendicular to a given line and that passes through a given point." Is a word missing, determine the equation from the graph of a line parallel or perpendicular to a given line that passes through a given point. I am not sure if this comment is appropriate for this section but I am unclear why the probability SEs are in geometry. They seem

choices for determining the importance of the findings that could include statistical significance (and various tests for estimating statistical significance), effect sizes, and confident intervals.

- a. In most instances the design team should be commended for their hard work and efforts to align the content horizontally. In general the content fits well, except where noted. However, this version seems to me to be a great improvement over the current version.
- b. I have some minor concerns about the vertical alignment especially with regard to vocabulary and number of SEs within some content/concept areas. There are a few instances where there are a number of SE's for a content/concept area at a grade level but that content/concept is relatively confined to that grade level. I guess there might be two arguments, 1) if it is only at one grade level it needs to be hit hard, and 2) if it is really only important at one grade level and not to subsequent mathematics success might there be something else that should be hit harder that might make a difference in subsequent mathematics courses. To make my assumptions explicit, I subscribe to the later and feel that spending more time on concepts that potentially pose more problems should receive more time and emphasis and if those items are revisited at more rigorous levels in subsequent courses it is also worth it to ensure later success. However, if this is not the prevailing sentiment perhaps a brief explanation as others are explained in the frequently asked questions section would help the reader.
- c.

career readiness which, I believe, these SEs do in a big way. However, implementing one change in only one aspect of a complex and highly interpersonal system like the teaching and learning process can have catastrophic effects unless each of the components are carefully addressed. Classroom teachers, district mathematics leaders, building and district level administration, and stakeholders need to be clearly informed, with sufficient opportunities for teacher professional development prior to rolling the SEs out.