

Instructions for Using the Templates for Calculating DECA Change Scores*

The purpose of this Excel template is to aid programs in calculating the difference between a child’s pre and posttest DECA *T*-scores and evaluating the magnitude of that difference. The magnitude of *T*-score differences are based on Cohen’s *d*-ratio and include:

Magnitude of the Difference	T-score Units
No change	Less than 2
Small	2 to 4, inclusive
Medium	5 to 7, inclusive
Large	8 or higher

The excel spreadsheet (*Template for Calculating DECA Change Scores – Positive and Negative*) calculates and evaluates both positive and negative differences in a child’s pre to posttest *T*-scores. For example, a difference of 4 points between pre and post test would display as Small Positive Change; difference of -7 between pre and posttest would display as a Medium Negative Change.

Each Excel version contains two sheets. The sheet labeled “Data” is where your program’s data can be entered. The sheet labeled “Graphs” contains summary presentations of your program’s pre and posttest DECA scores, as well as a look at the overall change categories from pre to posttest shown by children in your program.

To use either spreadsheet:

1. Enter your program’s data on the “Data” sheet. Columns are provided to enter child name or ID, dates of ratings, rater names, and pre and posttest DECA *T*-scores (scales and TPF).
2. Once a pre or posttest *T*-score is entered, the pre and posttest DECA categories will automatically be filled. *T*-scores of 60 and above will be identified as “Strength” and the cell will be colored green, *T*-scores of 41-59 will be identified in a blue cell as “Typical”, and *T*-scores below 40 will be identified as “Need” and shaded red.
3. Once both pre and posttest *T*-scores are entered, the “Change Score” and “Categories for Change Scores” columns will automatically populate based on Cohen’s guidelines. Please note that the interpretation of the change score category differs depending on whether you are examining a protective factor or behavioral concern scale. For example, an increase of 5 *T*-score points from pre to posttest on both the TPF and the BC will calculate as a Medium Positive Change. Although this is considered an improvement in the child’s social-emotional competence (TPF scale), it is actually an increase in the child’s behavioral concerns (BC scale) and not a positive *outcome*. A modification has been made to the color coding of the BC column to alert you to this change in interpretation.
4. To see an overall summary of your program’s scores, refer to the “Graphs” sheet. Summary data has been automatically compiled for your program based on the data you’ve entered.

*The same template can be used for DECA Infant, Toddler and Preschool ratings. The automatic columns on the “Data” sheet have been locked to protect the formulas. If you need to unlock this sheet for editing, please contact us at deca@devereux.org.