

WKCE Norms changed from 1996 to 2000

Changing the Wisconsin Knowledge and Concept Examinations Norms from 1996 to 2000

According to one educational group's report, all states' academic performances were above the "national average." And the statement was true! How could that be? It was true because the report used old test norms. If the nation's schools have improved over time in a subject area, comparing performance with old norms could show that all schools are "above average." That is why it is necessary to periodically update national norms. Traditionally norms are updated every 5 to 7 years. This allows state's to compare similar performances across the country and prevents erroneous statements like, "everyone's above average."

For the 2001-2002 testing cycle, the Wisconsin Knowledge and Concepts Examinations' norms were changed from 1996 to 2000. This assures meaningful comparisons with national performances. The following tables display how norm referenced scores have changed from 1996 to 2000.

The percentile ranks chosen reflect those listed in the Evaluation Summary Report. The scale scores used in these tables reflect those values which corresponded to the 1996 national norms for the 10th, 25th, 50th, 75th and 90th percentile scores. Generally speaking, the differences between the 1996 to 2000 norms represent a change of at most 3 percentile or NCE score points. There may be scale scores that have slightly greater differences, but that should be very rare.

The first column in the following tables lists scale scores. Scale scores are estimates of students' underlying ability and do not change if students' abilities do not change. Scale scores (unlike national percentiles) can be added, subtracted, and averaged across test levels. Such computations permit direct comparisons between classes, schools, or entire districts, for each content area. It is often the case that the norm referenced scores (e.g., percentiles and NCE) do slightly change when re-norming occurs.

It is not possible to make direct comparison of each of the test content areas because they are "scaled" separately. The scale scores for one content area cannot be compared with the scale scores for another content area. For example, a scale score of 686 on a language test would not have the same meaning as a scale score of 686 on a mathematics test.

Table 1: Changes in Percentile and Normal Curve Equivalent (NCE) Scores Based upon 1999 and 2000 Norms--Reading

Grade 4 Reading

Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
574	10	8	23	20
604	25	21	36	33
637	50	50	50	50
663	75	76	64	65
687	90	92	77	79
Grade 8 Reading				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
617	10	10	23	23
645	25	26	36	36
674	50	51	50	51
701	75	74	64	64
724	90	89	77	76
Grade 10 Reading				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
633	10	11	23	25
660	25	27	35	37
688	50	53	50	51
715	75	77	64	66
736	90	90	77	77

Sources: TerraNova Norms Book Winter; TerraNova, 2nd Ed., Norms Book Winter

Table 2: Changes in Percentile and Normal Curve Equivalent (NCE) Scores Based upon 1999 and 2000 Norms--Language

Grade 4 Language

Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
581	10	8	23	20
608	25	22	36	34
638	50	50	50	50
662	75	76	64	65
684	90	91	77	78

Grade 8 Language

Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
619	10	10	23	23
644	25	26	36	37
671	50	52	50	51
696	75	76	64	65
717	90	89	76	76

Grade 10 Language

Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
629	10	11	23	24
655	25	26	36	37
683	50	52	50	51

710	75	78	64	66
734	90	91	77	79

Sources: TerraNova Norms Book Winter; TerraNova, 2nd Ed., Norms Book Winter

Table 3: Changes in Percentile and Normal Curve Equivalent (NCE) Scores Based upon 1999 and 2000 Norms -- Mathematics

Grade 4 Mathematics				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
563	10	8	22	20
594	25	23	36	34
622	50	48	50	49
647	75	75	64	64
668	90	90	77	77
Grade 8 Mathematics				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
627	10	10	23	23
656	25	25	36	36
686	50	50	50	50
714	75	75	64	64
739	90	90	77	77
Grade 10 Mathematics				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE

638	10	10	23	24
671	25	25	36	36
705	50	51	50	51
736	75	76	64	65
759	90	89	77	76

Sources: TerraNova Norms Book Winter; TerraNova, 2nd Ed., Norms Book Winter

Table 4: Changes in Percentile and Normal Curve Equivalent (NCE) Scores Based upon 1999 and 2000 Norms-Science

Grade 4 Science

Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
574	10	10	23	23
602	25	24	36	35
630	50	50	50	50
656	75	75	64	64
678	90	89	77	76

Grade 8 Science

Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
632	10	10	23	23
658	25	23	36	35
685	50	50	50	50
710	75	75	64	64
732	90	90	77	77

Grade 10 Science				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
640	10	11	23	24
668	25	25	35	36
699	50	51	50	51
726	75	75	64	64
749	90	90	77	77

Sources: TerraNova Norms Book Winter; TerraNova, 2nd Ed., Norms Book Winter

Table 5: Changes in Percentile and Normal Curve Equivalent (NCE) Scores Based upon 1999 and 2000 Norms-Social Studies

Grade 4 Social Studies				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
582	10	7	22	18
609	25	21	36	33
635	50	48	50	49
657	75	75	65	64
676	90	90	77	77
Grade 8 Social Studies				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
627	10	7	22	20
652	25	23	36	34

677	50	50	50	50
700	75	76	64	65
720	90	90	77	77
Grade 10 Social Studies				
Scale Score	1996 Percentile	2000 Percentile	1996 NCE	2000 NCE
641	10	9	23	22
666	25	25	36	36
691	50	50	50	50
714	75	76	64	65
735	90	92	77	79

Sources: TerraNova Norms Book Winter; TerraNova, 2nd Ed., Norms Book Winter