

**Appendix 3\_9e Extended Assessment Writing Middle Factor Analysis**

Oregon 2008 Extended Assessment

Middle Grade Band WRITING Task Factor Analysis

**Math Items Across all Tasks**

N of Cases = 421

N of Items = 50

**Inter-item Correlations**

**Summary Item Statistics**

	Mean	Min	Max	Range	Maxi / Min	Var	N Items
Item Means	.870	.290	1.313	1.023	4.524	.076	50
Item Variances	.775	.299	.996	.697	3.333	.041	50
Inter-Item Correlations	.201	-.031	.427	.458	-13.664	.006	50

Alpha = .970

Standardized item alpha = .971

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.968
Bartlett's Test of Sphericity	Approx. Chi-Square	15135.121
	df	1225
	Sig.	.000

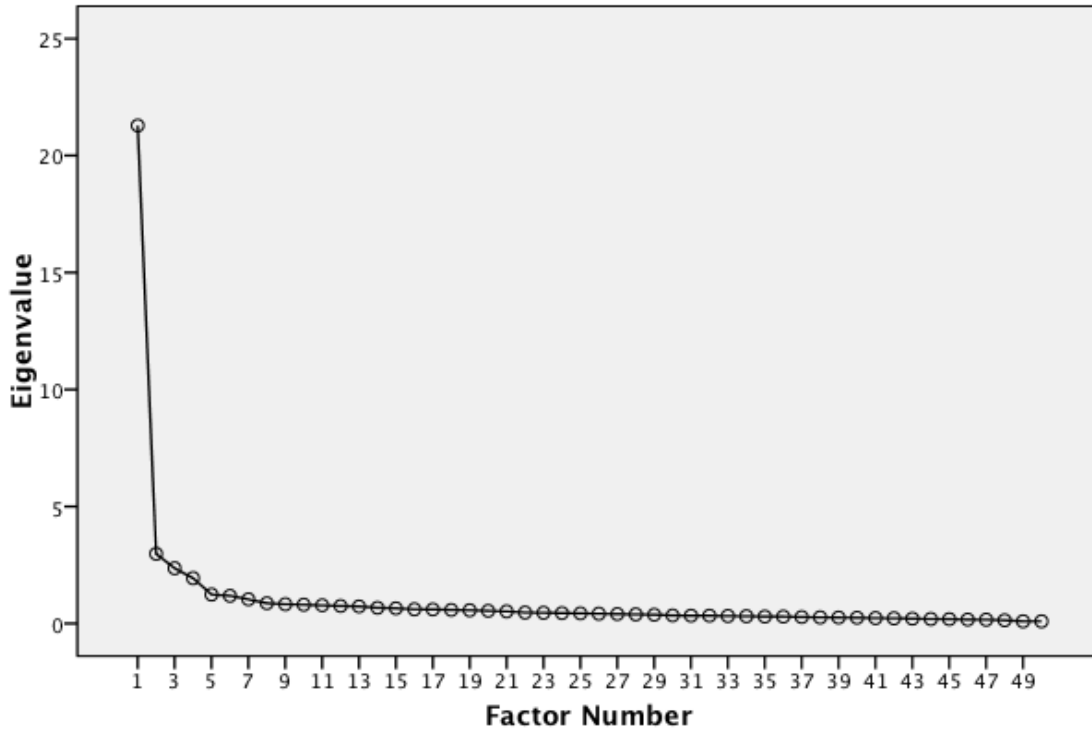
**Factor Analysis**

**Total Variance Explained**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	21.286	42.572	42.572	20.455	40.911	40.911	21.286	42.572
2	2.981	5.963	48.535	2.763	5.526	46.437	2.981	5.963	48.535
3	2.365	4.730	53.265	2.198	4.396	50.833	2.365	4.730	53.265
4	1.942	3.884	57.149	1.326	2.651	53.484	1.942	3.884	57.149
5	1.241	2.482	59.631	.921	1.842	55.326	1.241	2.482	59.631
6	1.188	2.377	62.007	.732	1.464	56.790	1.188	2.377	62.007
7	1.035	2.071	64.078	.721	1.441	58.232	1.035	2.071	64.078

Extraction Method: Maximum Likelihood.

**Scree Plot**



**Goodness-of-fit Test**

Chi-Square	df	Sig.
1475.731	896	.000

**Difference Between Model Fit for 1 Factor and Multiple Factor Models**

chisq1	chisq2	chidiff	df1	df2	dfdifff	prob
5320.51	1475.73	3844.78	1175	896	279	.00

**Rotated Factor Matrix<sup>a</sup>**

	Factor						
	1	2	3	4	5	6	7
t2r01	.244	.831	.224	.158	.133	.120	.081
t2r02	.240	.854	.159	.128	.129	.145	.075
t2r03	.232	.845	.206	.165	.142	.117	.094
t2r04	.233	.801	.162	.177	.143	.114	.087
t2r05	.203	.748	.148	.153	.171	.183	.069
t3r01	.260	.694	.185	.179	.159	.098	.104
t3r02	.106	.697	.190	.149	.169	.090	.068
t3r03	.488	.118	.184	.163	.204	.161	-.066
t3r04	.499	.182	.113	.169	.217	.107	-.059
t3r05	.469	.146	.201	.191	.149	.308	-.015
t4r01	.535	.215	.126	.215	.252	.264	-.086
t4r02	.645	.177	.109	.172	.231	.156	-.076
t4r03	.616	.128	.049	.185	.039	.164	.127
t4r04	.601	.131	.066	.078	.076	.122	.156
t4r05	.657	.122	.143	.058	.030	.095	.140
t5r01	.589	.066	.204	.037	.078	.248	.120
t5r02	.399	.193	.131	.149	-.013	.216	.092
t5r03	.525	.178	.107	.030	.052	.157	.124
t5r04	.694	.188	.179	.173	.118	.150	.108
t5r05	.710	.185	.140	.131	.152	.100	.161
t6r01	.083	.115	.024	.075	.085	.641	-.022
t6r02	.222	.065	.170	-.009	.105	.494	.112
t6r03	.150	.094	.139	.112	.070	.541	.074
t6r04	.205	.104	.084	.016	.012	.597	.060
t6r05	.233	.060	.073	.101	.046	.566	.118
t7r01	.356	.322	.280	.268	.470	.183	.150
t7r02	.225	.276	.242	.232	.643	.179	.139
t7r03	.198	.304	.281	.167	.545	.089	.188
t7r04	.238	.260	.365	.131	.556	.120	.127
t7r05	.242	.313	.356	.235	.557	.099	.081

t8r01	.254	.286	.503	.205	.304	.243	.227
t8r02	.232	.314	.623	.173	.163	.206	.225
t8r03	.156	.266	.653	.165	.183	.191	.169
t8r04	.190	.216	.694	.157	.182	.106	.048
t8r05	.207	.186	.711	.212	.173	.112	.008
t9r01	.256	.171	.313	.260	.244	.297	.365
t9r02	.285	.244	.296	.275	.264	.275	.490
t9r03	.261	.219	.490	.255	.217	.264	.359
t9r04	.220	.245	.339	.264	.340	.244	.478
t9r05	.258	.190	.327	.215	.150	.245	.515
t10r01	.427	.190	.266	.322	.210	.135	.323
t10r02	.299	.275	.345	.278	.237	.159	.242
t10r03	.461	.355	.116	.307	.203	-.034	.222
t10r04	.216	.212	.309	.372	.214	.053	.147
t10r05	.319	.237	.379	.386	.354	.065	.146
t11r01	.243	.321	.248	.676	.114	.120	.093
t11r02	.259	.290	.256	.643	.205	.109	.115
t11r03	.301	.241	.259	.573	.173	.173	.136
t11r04	.362	.258	.236	.555	.257	.182	.145
t11r05	.449	.369	.141	.386	.180	.066	.264

Extraction Method: Maximum Likelihood.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

## Task Level Factor Analysis

### Descriptive Statistics

	Mean	Std. Deviation	Analysis N
t2tot	7.53	3.272	438
t3tot	6.85	2.771	438
t4tot	6.80	2.861	438
t5tot	6.96	2.989	438
t6tot	3.84	3.273	438
t7tot	5.55	3.347	438
t8tot	4.74	3.440	438
t9tot	4.92	3.427	438
t10tot	5.91	3.137	438
t11tot	6.01	3.548	438

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.934
Bartlett's Test of Sphericity	Approx. Chi-Square	3668.340
	df	45
	Sig.	.000

### Communalities

	Initial	Extraction
t2tot	.639	.593
t3tot	.755	.701
t4tot	.694	.558
t5tot	.664	.568
t6tot	.337	.285
t7tot	.703	.717
t8tot	.675	.660
t9tot	.729	.716

t10tot	.766	.785
t11tot	.723	.746

Extraction Method:  
Maximum Likelihood.

**Total Variance Explained**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.682	66.817	66.817	6.330	63.297	63.297
2	.795	7.953	74.771			
3	.667	6.669	81.440			
4	.493	4.929	86.369			
5	.313	3.133	89.502			
6	.262	2.615	92.117			
7	.230	2.296	94.414			
8	.211	2.115	96.529			
9	.185	1.846	98.375			
10	.163	1.625	100.000			

Extraction Method: Maximum Likelihood.

**Factor Matrix<sup>a</sup>**

	Factor
	1
t2tot	.770
t3tot	.837
t4tot	.747
t5tot	.754
t6tot	.534
t7tot	.847
t8tot	.813
t9tot	.846
t10tot	.886

t11tot	.864
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Extraction Method:  
Maximum  
Likelihood.

a. 1 factors  
extracted. 4  
iterations required.

#### Goodness-of-fit Test

Chi-Square	df	Sig.
401.655	35	.000