

Essential Dispositions August 21, 2018

The North Dakota Association of Colleges for Teacher Education (NDACTE), a statewide organization comprised of representatives from every teacher preparation institution in North Dakota, has a subcommittee developing an instrument to assess professional dispositions* of teacher candidates. The items selected for a draft of key disposition items to assess are compiled from Interstate Teacher Assessment and Support Consortium (InTASC) standards and have been cross-walked with the work of Charlotte Danielson and Robert Marzano. InTASC defines dispositions as follows: **The habits of professional action and moral commitments that underlie an educator's performance (InTASC Model Core Teaching Standards, p. 6.)*

The C. H. Lawshe method was used to provide evidence of **content validity by gauging agreement among raters or judges regarding how essential a particular item is to assessing a performance or construct**. Lawshe (1975) proposed that each of the subject matter expert raters (SMEs) on the judging panel respond to the following question for each item: "Is the skill or knowledge measured by this item 'essential,' 'useful, but not essential,' or 'not necessary' to the performance of the construct?" If more than half the panelists indicate an item is essential, that item has at least some content validity. Greater levels of content validity exist as larger numbers of panelists agree a particular item is essential. Using these assumptions, Lawshe developed a formula termed the content validity ratio, $CVR = [(E - (N / 2)) / (N / 2)]$.

Procedure

Eighty-three **subject matter experts (SMEs)** reviewed 43 InTASC dispositional items and rated them as “Essential”, “Useful, but not Essential”, or “Not Necessary”. All were involved with education in North Dakota schools. Teacher Education Faculty and/or University Supervisors (59), PK-12 Cooperating Teachers (16), PK-12 Administrators (7), Other (1). The response ratings were tallied and a Content Validity Ratio (CVR) was established using the following formula, using the total number of experts (N) and the number who rated the descriptor as essential (E): $CVR = [(E - (N / 2)) / (N / 2)]$

The following information is from a CAEP recommendation from a PowerPoint prepared by Dr. Stevie Chepko, Senior VP for Accreditation (Retrieved on October 17, 2017 from <https://www.education.ne.gov/wp-content/uploads/2017/07/NE-ContentValidityReliability.pdf>)

- CVR is calculated for each indicator
- A minimum value of the CVR is based on the number of panelists and is on a CVR Table
- CVR values range from -1.0 to + 1.0 The closer to 1.0 the CVR is, the more essential the object is considered to be. Conversely, the closer to -1.0 the CVR is, the more non-essential it is.
- The more panelists the lower the CVR value
 - 5 panelists requires a minimum CVR value of .99
 - 15 panelists requires a minimum CVR value of .49
 - 40 panelists requires a minimum CVR value of .29
 - **83 panelists (the NDACTE survey total) requires a minimum CVR value of .205**
- The process allows for the retention or rejection of individual items

The number of panelists exceeded the CAEP values provided by Dr. Chepko. Dr. Brent Hill (NDSU) calculated a table for higher “N” values using the work of Ayre and Scally (2014). The calculations are very slightly different from the critical values from Wilson et al. (2012) and Lawshe (1975), but considered to produce even more precise critical values. With 83 panelists, the critical number of “Essential” responses calculated to be 50 with a proportion of agreement on the “Essential” rating at 0.602 and a CVR of .205.

The “essential” ratings of 83 SMEs indicated a high enough level of agreement among the raters that *a content validity ratio of 0.205 or higher* were identified for 28 of the 43 dispositional items. The 28 items highlighted in light green have the strongest evidence for retention among the 43 InTASC items. Each of the four InTASC categories had items viewed as “Essential”: Learner and Learning (InTASC 1-3) had 8 items; Content (InTASC 4-5) 2 items; Instructional Practice (InTASC 6-8) 5 items; Professional Responsibility (InTASC 9-10) 13 items. Any items with CVR ratings close to .205, such as the two items at 0.195, will be discussed by the subcommittee. The NDACTE subcommittee will consider the data to help narrow down the list of 43 items used to develop a dispositional assessment instrument that is both valid and practical. Additional data from other SMEs will be gathered and discussed before the final decisions are made.

Essential Dispositions - Lawshe Method August 21, 2018

#	Dispositional Attribute	Essential	Useful, but not Essential	Not Necessary	Total	Content Validity Ratio
Learner and Learning (InTASC Standards 1-3) Please rate the following items as "essential", "useful, but not essential", or "not necessary" for assessing professional dispositions of teacher candidates in a teacher preparation program.						
1	Respects learners' developmental strengths/needs (InTASC 1.h) (Danielson 1b) (Marzano 19,20)	62	20	0	82	0.512
2	Commits to using learners' strengths as a basis for their growth (InTASC 1.i, 1.j) (Danielson 3c) (Marzano 3,15,20)	49	32	1	82	0.195
3	Values input from all stakeholders (e.g., families, colleagues, other professionals) regarding learners' growth/development (InTASC 1.k, 1.l) (Danielson 4c) (Marzano 3)	45	37	0	82	0.098
4	Believes that all students can learn/ achieve (InTASC 2.l, 2.n) (Danielson 2.b)(Marzano 19)	75	5	1	81	0.852
5	Responds respectfully to individual needs (InTASC 2.m) (Danielson 2.d) (Marzano 20)	68	12	2	82	0.659
6	Commits to knowing about the cultures and communities that impact their students (InTASC 2.m, 2.n, 2.o, 3.n) (Marzano 19)	54	26	1	81	0.333
7	Displays a commitment to provide equitable learning and development opportunities for all (InTASC 3.n, 3.o) (Danielson 2a) (Marzano 15,20)	63	16	2	81	0.556
8	Believes that the classroom environment greatly affects students' learning (InTASC 3.n, 3.o, 3.p, 3.q) (Danielson 2a) (Marzano 17, 19,20)	64	18	0	82	0.561
9	Displays a commitment to developing a thoughtful/ responsive educational community (InTASC 3.q, 3.r) (Danielson 2b) (Marzano 17,19)	40	34	8	82	-0.024
10	Engages learners in decision-making for purposeful learning (InTASC 3.p)(Danielson 3c)(Marzano 18)	51	29	2	82	0.244
11	Engages learners in collaborative learning (InTASC 3.o, 3.p, 3.q) (Danielson 3c)(Marzano 16)	54	27	1	82	0.317
Content (InTASC Standards 4-5) Please rate the following items as "essential", "useful, but not essential", or "not necessary" for assessing professional dispositions of teacher candidates in a teacher preparation program.						
1	Commits to making learning opportunities accessible to all learners (InTASC 4.r) (Danielson 3c)(Marzano 2)	79	3	0	82	0.927
2	Is committed to engaging learners in critical analysis of multiple perspectives to increase learners' content/skill mastery (InTASC 4.p, 4.q, 4.r)(Marzano 4)	38	42	1	81	-0.062
3	Is committed to engaging learners in critical/creative thinking as a means to solve local/global issues (InTASC 5q)(Marzano 13)	49	32	1	82	0.195
4	Is committed to linking subject content to real life issue (InTASC 5.q, 5.s)(Marzano 2)	56	25	0	81	0.383
5	Values student exploration that encourages new discoveries/ meaning (InTASC 5.r, 5.s) (Danielson 3c)(Marzano 11)	46	33	3	82	0.122
Instructional Practice (InTASC Standards 6-8) Please rate the following items as "essential", "useful, but not essential", or "not necessary" for assessing professional dispositions of teacher candidates in a teacher preparation program.						
1	Takes responsibility for using student assessment data in teaching and learning (InTASC 6.r, 6.t, 6.v) (Danielson 3.d)	63	19	0	82	0.537
2	Commits to engaging learners in the assessment process* [*assessment process = choice of assessment, interpretation of assessment data, communication of assessment data] (InTASC 6.q, 6.s, 6.v) (Danielson 3d)(Marzano 14)	35	45	2	82	-0.146
3	Commits to making accommodations in testing/ assessments for all learners (InTASC 6.t, 6.u, 6.v) (Danielson 3d)	71	10	1	82	0.732
4	Takes responsibility for aligning assessment and instruction with learning goals/ standards (InTASC 6.r, 6.v) (Danielson 1c)(Marzano 14)	71	11	0	82	0.732

5	Is committed to organizing learning opportunities that will promote student growth (InTASC 7.n, 7.p, 4.r, 9.l)(Danielson 1a)(Marzano 3)	64	17	1	82	0.561
6	Demonstrates flexibility in planning for learner needs (InTASC 7.n, 7.p, 7.q, 8.p)(Danielson 3e)(Marzano 3)	69	13	0	82	0.683
7	Values collaborative planning (InTASC 7.o)	40	43	0	83	-0.036
8	Values the use of reciprocity to adapt instruction for learner needs (InTASC 8.p, 8.s) (Danielson 3a)(Marzano 11,12)	29	50	2	81	-0.284
9	Values the use of new/ emerging technologies that will promote student learning (InTASC 8.r, 8.q) (Danielson 1d)	43	37	2	82	0.049
Professional Responsibility (InTASC Standards 9-10) Please rate the following items as "essential", "useful, but not essential", or "not necessary" for assessing professional dispositions of teacher candidates in a teacher preparation program.						
1	Maintains a positive attitude in academic/ professional settings (InTASC 9.m, 9.n)(Danielson 4d)(Marzano 21)	71	11	0	82	0.732
2	Commits to professional appearance in dress and grooming (InTASC 9.o)(Marzano 21)	50	31	0	81	0.235
3	Commits to upholding the role of educator in all legal/ ethical ways* *honesty, integrity, fairness, confidentiality, FERPA, Code of Ethics (InTASC 9.o) (Danielson 4f)(Marzano 21)	80	3	0	83	0.928
4	Values appropriate interpersonal relationships in all settings (InTASC 3.n, 10.r, 9.o) (Danielson 4.f) (Marzano 23)	58	23	2	83	0.398
5	Is dependable: prepared, on time (InTASC 9.o) (Danielson 4f)(Marzano 21)	76	7	0	83	0.831
6	Values self-assessment reflective practice to overcome limitations and enhance strengths (InTASC 9.l, 9.m, 9.n, 10.t) (Danielson 4.a) (Marzano 22)	58	24	1	83	0.398
7	Initiates self-directed learning/ professional development (InTASC 9.l, 9.m, 9.n) (Danielson 4e) (Marzano 23)	40	43	0	83	-0.036
8	Is committed to life-long learning by disseminating up-to-date knowledge/ research in the field (InTASC 9.n, 10.p, 10.r, 10.s) (Danielson 4.e) (Marzano 1,22)	41	39	1	81	0.012
9	Shows initiative in creating opportunities for positive change with mutual benefit (InTASC 10.p, 10.r, 10.s, 10.t) (Danielson 4.e) (Marzano 23)	30	48	3	81	-0.259
10	Is approachable: nonthreatening, positive (InTASC 10.q, 10.r)(Marzano 23)	72	9	1	82	0.756
11	Receives/uses constructive feedback professionally (InTASC 10.t)(Danielson 4d)(Marzano 22)	77	6	0	83	0.855
12	Contributes professionally to the discussion between stakeholders regarding children's education (InTASC 10.p, 10.q, 10.r, 10.s) (Danielson 4.d) (Marzano 23)	41	39	3	83	-0.012
13	Advocates for the developmental/ academic needs of students during collaboration with stakeholders (InTASC 10.p, 10.q) (Danielson 4c, 4f)(Marzano 23)	47	33	3	83	0.133
14	Listens actively to stakeholders regarding children's education (InTASC 10.p, 10.q, 10.s) (Danielson 4c)(Marzano 23)	51	31	1	83	0.229
15	Communicates professionally through nonverbal means (body language, tone of voice) when working with stakeholders (InTASC 10.p, 10.q, 10.s)(Danielson 4c)(Marzano 23)	57	26	0	83	0.373
16	Communicates professionally through electronic means (email, social media, course mgmt. system) (InTASC 10.q, 10.r) (Danielson 4c)	62	21	0	83	0.494
17	Communicates professionally in oral language when working with stakeholders (InTASC 10.p, 10.q, 10.r, 10.s) (Danielson 4c)	67	16	0	83	0.614
18	Accepts responsibility for personal actions and behaviors (InTASC 9.l, 10.p) (Danielson 4f)	79	4	0	83	0.904

Reliability Analysis

The reliability of the scales suggested by the factor loadings was assessed using Cronbach’s alpha. The alpha coefficients, all greater than .70, signify good internal consistency for these constructs. The results are displayed in Table 2.

Table 2:

Constructs	Cronbach’s Alpha
Learner and Learning, Content and Instructional Practice	0.94476
Professional Responsibility	0.960597