

# Collective Responsibility for Excellence and Ethics (CREE): Student & Staff Survey Reliability and Validity (ver. 2.5)

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This instrument is aligned with several major constructs described in *Smart & Good High Schools: Integrating Excellence and Ethics for Success in Schools, Work, and Beyond* (Lickona and Davidson, 2005). The Smart & Good Schools framework proposes a definition of character as having two essential and interconnected parts: performance character and moral character. Performance character can be described as a “mastery orientation.” It consists of qualities needed to realize one’s potential for excellence in any performance environment, such as academics, extracurricular activities, the workplace, and throughout life (for example, diligence, perseverance, a strong work ethic, a positive attitude, ingenuity, and self-discipline). Moral character is a “relational orientation.” It consists of qualities needed for successful interpersonal relationships and ethical conduct (for example, integrity, justice, caring, respect, and cooperation). Moral character enables us to act with integrity in our ethical lives. It has the important job of moderating our performance goals to honor the interests of others, to ensure that we do not violate moral values such as fairness, honesty, and caring in the pursuit of high performance.

Character has four important roles for character in academic life and work in general (Davidson, Lickona, and Khmelkov, 2008). First, students need performance character (initiative, self-discipline, perseverance, teamwork, etc.) in order to do their best academic work. Second, students develop their performance character from working hard and smart on their schoolwork. Third, students need moral character (respect, fairness, kindness, honesty, etc.) in order to create the relationships that make for a positive learning environment. Fourth, students develop moral character from their schoolwork—for example, by helping their peers to do their best work through constructive critique, studying ethical issues in the curriculum, and carrying out service learning projects that help solve real-world problems – and from being in a supportive environment.

The **CREE Student Form** measures:

1) *School/Classroom Climate*: a) *Social Health and Safety*, measuring the extent to which students feel safe in the school, as opposed to being exposed to disruptive behavior or incidents of peer cruelty or violence, and b) *Social Capital* generated in the classroom/school community by adults.

2) *Ethical Learning Community*, conceptualized as (a) acceptance of differences in schoolmates and attachment to the classroom/school community, (b) collective responsibility for classroom/school community, or courage and commitment to challenge others to be and to do their best.

3) *Experiences of Learning the Strengths of Character*, focusing on student perceptions of the opportunities created by adults in the school and arising through interactions with schoolmates in which youth develop performance character—such strengths of character as diligent and capable performer and lifelong learner and critical thinker—and moral character—such strengths of character as socially and emotionally skilled person, ethical thinker, respectful and responsible moral agent, contributing community member and democratic citizen.

4) *Performance Character and Moral Character*, conceptualized as (a) commitment and self-discipline of individuals to challenge themselves to do their best work, to strive for excellence, and to improve their knowledge, attitude, and skills in any performance environment, such as academics, extracurricular activities, the workplace, and throughout life; and (b) commitment and self-discipline of individuals to challenge themselves to be their best ethical selves, to strive to do the right thing, to be responsible members of various social groups—in the classroom, on the playing field, and so on.

The **CREE Faculty/Staff Form** measures:

1) *School/Classroom Climate (long form only)*: a) *Social Health and Safety*, measuring the extent to which students feel safe in the school, as opposed to being exposed to disruptive behavior or incidents of peer cruelty or violence, and b) *Social Capital* generated in the classroom/school community by adults.

2) *Professional Ethical Learning Community*, measuring faculty and staff perceptions of colleagues' commitment to explicit and integrated focus on excellence and ethics for students and for themselves, including evidence of such approaches as developing shared purpose and identity, aligning practices with desired outcomes, having a voice and taking a stand, grappling with tough issues, practicing personal responsibility for continuous self-improvement and collective responsibility for excellence and ethics.

3) *Assessment of the Ethical Learning Community*—parallel to student reports of (a) acceptance of differences in schoolmates and attachment to the classroom/school community, and (b) collective responsibility, or courage and commitment to challenge others to be and to do their best.

4) *Teaching the Strengths of Character*—faculty and staff practices promoting performance character, conceptualized as focus on such strengths of character as diligent and capable performer and lifelong learner and critical thinker, and practices promoting moral character, conceptualized as focus on development of such strengths of character as socially and emotionally skilled person, ethical thinker, respectful and responsible moral agent, contributing community member and democratic citizen

5) *Assessments of Student Performance and Moral Character*—parallel to student own reports of their corresponding behavior.

## Reliability

Tables 1 and 2 present information on the internal consistency (Cronbach's Alpha) and percent of variance accounted for by the items of the scales utilized by Cornerstone Consulting I evaluation, LLC in the Hyde project and in several other projects. Senate weight was used in this analysis to "equalize" statistically the contribution of each school to the pooled information (thus, valid N shown reflects weighted sample size, rather than the actual size).

All of the scales utilized in this version of CREE have consistently high to excellent internal consistency. This is evidenced by Cronbach's alphas in our data when administered as part of the CREE instrument ranging from extensive at .70 to exemplary at .96 (see Robinson et al, 1991). Only Student Perceptions of PC Practices by Faculty/Staff registered an alpha of .67, Cooperative Learning Style had an alpha of .67, and Teaching for Understanding had an alpha of .66 in our middle schools sample, while consistently having higher alphas in other samples. See also the range of alphas observed in other studies, if available, as noted in the description of the scales section.

Table 1. Reliability Alphas and Variance Explained in Factor Analysis

CREE Student Survey									
	High & Middle Schools			High Schools			Middle Schools		
	Valid N	Cronbach's Alpha	% Variance Explained	Valid N	Cronbach's Alpha	% Variance Explained	Valid N	Cronbach's Alpha	% Variance Explained
Performance Character	622	.72	38.8	171	.75	50.8	452	.71	47.5
Moral Character	625	.76	52.8	171	.76	45.5	453	.76	53.4
ELC: Students	7,994	.85	48.3	3,725	.84	47.5	4,269	.86	49.0
Acceptance of Differences in Peers & Attachment to Class/School Community	8,412	.72	50.8	3,866	.72	51.7	4,546	.72	50.3
Collective Responsibility for Class/School Community	8,298	.80	42.8	3,848	.78	40.4	4,450	.82	44.4
Performance Character Experiences in School	1,945	.72	51.7	546	.74	43.4	1,399	.67	50.3
Moral Character Experiences in School	586	.90	51.9	175	.91	55.7	411	.88	55.2
Performance Character Experiences at Home	621	.90	66.0	178	.88	61.0	442	.89	64.6
Moral Character Experiences at Home	631	.92	57.1	178	.93	61.8	453	.91	55.3
Intrinsic Interest in Reading	687	.73	55.6	189	.79	61.4	498	.70	53.2
Intrinsic Interest in Writing	671	.75	57.4	188	.81	63.8	483	.71	53.1
Self-Efficacy in Math	674	.86	64.2	188	.91	75.3	486	.81	58.1
Cooperative Learning Style	2,067	.69	52.2	570	.74	57.2	1,497	.67	50.6
Competitive Learning Style	2,077	.80	71.6	572	.81	72.4	1,505	.80	71.0

Table 2. Reliability Alphas and Variance Explained in Factor Analysis

CREE Faculty/Staff Survey									
	High & Middle			High Schools			Middle Schools		
	Valid N	Cronbach's Alpha	% Variance Explained	Valid N	Cronbach's Alpha	% Variance Explained	Valid N	Cronbach's Alpha	% Variance Explained
Assessment of Student Performance Character	134	.91	51.5	42	.91	70.0	92	.91	69.1
Assessment of Student Moral Character	125	.79	54.7	39	.78	57.2	86	.80	70.1
Assessment of ELC	350	.90	54.3	213	.90	49.0	137	.89	55.3
ELC: Acceptance & Attachment	358	.81	56.7	217	.82	45.3	141	.78	55.5
ELC: Responsibility for Community	357	.85	48.9	215	.85	48.8	142	.85	48.9
PELC: Personal Responsibility	106	.89	61.9	39	.92	69.7	67	.85	68.2
Engagement in PELC: Personal Responsibility	113	.79	66.0	40	.85	61.5	73	.75	65.6
Engagement in PELC: Voice and Carefrontation	113	.84	63.4	39	.88	67.1	74	.81	61.2
PELC: Leadership & Collective Responsibility	117	.88	66.4	38	.90	73.7	79	.85	68.3
PELC: Leadership	125	.83	67.8	42	.85	57.5	83	.81	70.1
PELC: Collective Responsibility	123	.80	64.8	39	.83	71.7	84	.77	65.4
Promoting Performance Character	343	.85	62.4	80	.80	62.2	263	.85	62.9
Promoting Moral Character	115	.89	63.8	37	.87	67.6	78	.89	64.4
Teaching for Understanding	122	.70	49.6	42	.76	68.3	80	.66	60.7
Teaching for Diligent and Capable Performance	343	.85	62.4	80	.80	62.2	263	.85	62.9
Direct CE Instruction	345	.75	47.4	211	.77	48.3	133	.72	63.1
Creating Caring & Engaging Climate	125	.84	67.2	40	.75	57.3	85	.88	73.6
Responsible Discipline	119	.87	63.7	39	.83	63.2	80	.88	65.4
Teaching Character Skills in Action	561	.81	51.5	249	.80	50.7	312	.80	50.7
Personal Efficacy in Teaching Performance Character							27	.96	78.5
Personal Efficacy in Teaching Moral Character							27	.98	83.7
Sense of Efficacy for Instructional Strategies							25	.85	69.8
Sense of Efficacy for Classroom Management							27	.88	73.7
Sense of Efficacy for Student Engagement							28	.71	86.7

Table 3. Validity Correlations

CREE Student Survey												
	Performance Character	Moral Character	ELCstudt	Acceptance & Attachment	Responsibility for Community	Performance Character Experiences in School	Moral Character Experiences in School	Performance Character Experiences at Home	Moral Character Experiences at Home	Cooperative Learning Style	Competitive Learning Style	Math Self-Efficacy
Performance Character	1	.651(**)	.415(**)	.379(**)	.381(**)	.405(**)	.320(**)	.338(**)	.389(**)	.146(**)	.047	.207(**)
Moral Character	.651(**)	1	.505(**)	.430(**)	.493(**)	.362(**)	.475(**)	.269(**)	.319(**)	.226(**)	-.049	.136(**)
ELCstudt	.415(**)	.505(**)	1	.881(**)	.906(**)	.460(**)	.497(**)	.211(**)	.302(**)	.278(**)	-.025	.095(*)
Acceptance & Attachment	.379(**)	.430(**)	.881(**)	1	.598(**)	.376(**)	.396(**)	.112(**)	.239(**)	.222(**)	-.023	.073
Responsibility for Community	.381(**)	.493(**)	.906(**)	.598(**)	1	.457(**)	.516(**)	.274(**)	.315(**)	.283(**)	-.022	.101(*)
Performance Character Experiences in School	.405(**)	.362(**)	.460(**)	.376(**)	.457(**)	1	.705(**)	.457(**)	.466(**)	.208(**)	-.005	.210(**)
Moral Character Experiences in School	.320(**)	.475(**)	.497(**)	.396(**)	.516(**)	.705(**)	1	.544(**)	.500(**)	.131(**)	.005	.194(**)
Performance Character Experiences at Home	.338(**)	.269(**)	.211(**)	.112(**)	.274(**)	.457(**)	.544(**)	1	.701(**)	.115(**)	-.054	.176(**)
Moral Character Experiences at Home	.389(**)	.319(**)	.302(**)	.239(**)	.315(**)	.466(**)	.500(**)	.701(**)	1	.107(*)	.011	.175(**)
Cooperative Learning Style	.146(**)	.226(**)	.278(**)	.222(**)	.283(**)	.208(**)	.131(**)	.115(**)	.107(*)	1	-.015	.045
Competitive Learning Style	.047	-.049	-.025	-.023	-.022	-.005	.005	-.054	.011	-.015	1	.200(**)
Math Self-Efficacy	.207(**)	.136(**)	.095(*)	.073	.101(*)	.210(**)	.194(**)	.176(**)	.175(**)	0.045	.200(**)	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 4. Validity Correlations

CREE Faculty/Staff Survey									
	Student Performance Character	Student Moral Character	Assessment of ELC	Acceptance & Attachment	Responsibility for Community	PELC: Collective Responsibility	PELC: Personal Responsibility	Promoting Performance Character	Promoting Moral Character
Student Performance Character	1	.710(**)	.738(**)	.684(**)	.697(**)	.398(**)	-.079	.348(**)	.291(**)
Student Moral Character	.710(**)	1	.829(**)	.808(**)	.745(**)	.308(**)	.029	.014	-.006
Assessment of ELC	.738(**)	.829(**)	1	.923(**)	.936(**)	.345(**)	-.014	.017	.182(**)
Acceptance & Attachment	.684(**)	.808(**)	.923(**)	1	.729(**)	.322(**)	.013	-.012	.153(**)
Responsibility for Community	.697(**)	.745(**)	.936(**)	.729(**)	1	.321(**)	-.039	.044	.185(**)
PELC: Collective Responsibility	.398(**)	.308(**)	.345(**)	.322(**)	.321(**)	1	.218(*)	.322(**)	.273(**)
PELC: Personal Responsibility	-.079	.029	-.014	.013	-.039	.218(*)	1	.161	.299(**)
Promoting Performance Character	.348(**)	.014	.017	-.012	.044	.322(**)	.161	1	.711(**)
Promoting Moral Character	.291(**)	-.006	.182(**)	.153(**)	.185(**)	.273(**)	.299(**)	.711(**)	1
Teaching for Understanding	.186(**)	.076	.042	.072	.008	.179(*)	.153	.511(**)	.458(**)
Teaching for Diligent and Capable Performance	.348(**)	.010	.018	-.010	.044	.322(**)	.156	1.000(**)	.712(**)
Direct CE Instruction	.249(**)	-.003	.116(*)	.092	.122(*)	.173	.258(**)	.597(**)	.890(**)
Creating Caring & Engaging Climate	.157	.187(*)	.180(**)	.194(**)	.143(**)	.211(*)	.172	.644(**)	.707(**)
Responsible Discipline	.027	-.009	.180(**)	.153(**)	.181(**)	.292(**)	.276(**)	.703(**)	.892(**)
Teaching Character Skills in Action	.320(**)	-.026	.196(**)	.143(**)	.218(**)	.268(**)	.376(**)	.662(**)	.810(**)
Personal Efficacy in Teaching Performance Character	.298(*)	.066	-.005	.136	-.108	.250	.179	.462(**)	.397(**)
Personal Efficacy in Teaching Moral Character	.404(**)	.175	.039	.103	-.015	.303(*)	.255	.480(**)	.382(*)
Sense of Efficacy for Instructional Strategies	.148	.211	.006	.005	.005	.281	.123	.396(**)	.234
Sense of Efficacy for Classroom Management	.142	.113	-.051	-.066	-.031	.336(*)	.083	.161	-.149
Sense of Efficacy for Student Engagement	.365(**)	.413(**)	.261	.152	.297(*)	.549(**)	.189	.138	-.141

CREE Faculty/Staff Survey											
	Teaching for Understanding	Teaching for Diligent and Capable Performance	Direct CE Instruction	Creating Caring & Engaging Climate	Responsible Discipline	Teaching Character Skills in Action	Personal Efficacy in Teaching Performance Character	Personal Efficacy in Teaching Moral Character	Sense of Efficacy for Instructional Strategies	Sense of Efficacy for Classroom Management	Sense of Efficacy for Student Engagement
Student Performance Character	.186(**)	.348(**)	.249(**)	.157	.027	.320(**)	.298(*)	.404(**)	.148	.142	.365(**)
Student Moral Character	.076	.010	-.003	.187(*)	-.009	-.026	.066	.175	.211	.113	.413(**)
Assessment of ELC	.042	.018	.116(*)	.180(**)	.180(**)	.196(**)	-.005	.039	.006	-.051	.261
Acceptance & Attachment	.072	-.010	.092	.194(**)	.153(**)	.143(**)	.136	.103	.005	-.066	.152
Responsibility for Community	.008	.044	.122(*)	.143(**)	.181(**)	.218(**)	-.108	-.015	.005	-.031	.297(*)
PELC: Collective Responsibility	.179(*)	.322(**)	.173	.211(*)	.292(**)	.268(**)	.250	.303(*)	.281	.336(*)	.549(**)
PELC: Personal Responsibility	.153	.156	.258(**)	.172	.276(**)	.376(**)	.179	.255	.123	.083	.189
Promoting Performance Character	.511(**)	1.000(**)	.597(**)	.644(**)	.703(**)	.662(**)	.462(**)	.480(**)	.396(**)	.161	.138
Promoting Moral Character	.458(**)	.712(**)	.890(**)	.707(**)	.892(**)	.810(**)	.397(**)	.382(*)	.234	-.149	-.141
Teaching for Understanding	1	.511(**)	.469(**)	.268(**)	.259(**)	.389(**)	.046	.048	.119	.322(*)	-.024
Teaching for Diligent and Capable Performance	.511(**)	1	.597(**)	.645(**)	.704(**)	.662(**)	.464(**)	.479(**)	.398(**)	.166	.141
Direct CE Instruction	.469(**)	.597(**)	1	.548(**)	.556(**)	.747(**)	.109	.059	.037	-.291(*)	-.312(*)
Creating Caring & Engaging Climate	.268(**)	.645(**)	.548(**)	1	.687(**)	.572(**)	.299(*)	.392(**)	.145	-.167	-.106
Responsible Discipline	.259(**)	.704(**)	.556(**)	.687(**)	1	.687(**)	.500(**)	.507(**)	.319(*)	-.046	-.020
Teaching Character Skills in Action	.389(**)	.662(**)	.747(**)	.572(**)	.687(**)	1	.575(**)	.493(**)	.372(*)	.019	.063
Personal Efficacy in Teaching Performance Character	.046	.464(**)	.109	.299(*)	.500(**)	.575(**)	1	.833(**)	.408(**)	.453(**)	.199
Personal Efficacy in Teaching Moral Character	.048	.479(**)	.059	.392(**)	.507(**)	.493(**)	.833(**)	1	.383(**)	.541(**)	.321(*)
Sense of Efficacy for Instructional Strategies	.119	.398(**)	.037	.145	.319(*)	.372(*)	.408(**)	.383(**)	1	.520(**)	.684(**)
Sense of Efficacy for Classroom Management	.322(*)	.166	-.291(*)	-.167	-.046	.019	.453(**)	.541(**)	.520(**)	1	.606(**)
Sense of Efficacy for Student Engagement	-.024	.141	-.312(*)	-.106	-.020	.063	.199	.321(*)	.684(**)	.606(**)	1

\*\* . Correlation is significant at the 0.01 level (2-tailed); \* . Correlation is significant at the 0.05 level (2-tailed).



## Construct Validity

To explore predictive, convergent and discriminant validity, the pattern of relationships between various constructs measured by CREE was established by examining bivariate correlations in the student and faculty/staff samples. The goal of this analysis is to ascertain whether the observed pattern of relationships in the data corresponds to the theoretical pattern of relationships between constructs of interest, or whether constructs simultaneously demonstrate discriminant and convergent validity as could be predicted theoretically (Trochim & Donnelly, 2006).

Based on extant research and theoretically expected relationships between the scales, the following two types of hypotheses were tested:

1) Extant research suggests that school/classroom climate and student experiences of character development scales should be able to predict indicators of students' performance and moral character better than would measures of students' learning style or academic self-efficacy. Evidence of such pattern of relationships would constitute predictive validity of the instrument.

2) According to the theoretical model underlining this research, experiences of character education and students' character would be expected to be positively correlated. More specifically, however, these relationships would be expected to be stronger within performance character-related measures and within moral character-related measures, than across the two domains of character. Similarly, in the faculty/staff data, one would expect stronger relationships within perceptions of various types of student behaviors and within perceptions of various types of faculty/staff beliefs and practices, than between these domains. Such patterns of relationships in the data would be evidence of simultaneous convergent and discriminant validity of the instrument.

To test the expected relationships between scales in the instrument, bivariate correlation coefficients for the scales are presented in Table 3 (Student Sample) and Table 4 (Faculty/Staff Sample). As hypothesized, all relationships between character, character-related experiences, and school/classroom climate scales in the instrument are positive and statistically significant. Both character-related experiences and Ethical Learning Community scales developed for CREE are much stronger predictors of student performance and moral character, than they are of student academic motivation and learning style (Cooperative Learning Style, Competitive Learning Style, or Self-Efficacy in Math – all scales taken from external research, with reliability and validity established in extant research, see references in Scale Descriptions below). For example, Ethical Learning Community scale has a correlation of .415 ( $p < .01$ ) with performance character and .505 ( $p < .01$ ) with moral character, but only .095 ( $p < .05$ ) with self-efficacy in math, -.025 with competitive learning style (not significant), and .226 ( $p < .01$ ) with cooperative learning style. Moral Character Experiences in School scale has a correlation of .320 ( $p < .01$ ) with performance character and .475 ( $p < .01$ ) with moral character, but only .194 ( $p < .01$ ) with self-efficacy in math, .005 with competitive learning style (not significant), and .131 ( $p < .01$ )

with cooperative learning style. This pattern of relationships holds for all of the other character-related scales providing strong evidence in support of predictive validity, as well as discriminant validity. Additional data is being collected by Cornerstone Consulting & Evaluation, LLC to examine how character-related scales in CREE Survey predict constructs measured independently, such as academic achievement and disciplinary referrals.

Patterns of observed relationships in the data within and between domains, such as performance and moral, as demonstrated by the size of correlation coefficients, correspond completely to the patterns that were expected: performance character-related scales are stronger correlated with each other than they are with moral character-related scales, and the other way around. For example, correlation of performance character experiences in school with performance character is .405 ( $p < .01$ ), whereas with moral character it is only .362 ( $p < .01$ ). On the other hand, correlation of moral character experiences in school with moral character is .475 ( $p < .01$ ), whereas with performance character it is only .320 ( $p < .01$ ). Somewhat similarly, when two domains of learning style are examined, all character-related scales have positive significant correlations with cooperative learning style, but no significant correlations with competitive learning style.

In the faculty/staff sample, various student assessment scales have correlations ranging from .684 to .936 between each other, whereas their correlations to scales measuring faculty perceptions of colleagues or self-reported practices range from 0 to only .348. Conversely, faculty/staff various practices scales have higher correlations with each other, than they have with student assessment scales. For example, Teaching for Diligent and Capable Performance scale has a correlation of .597 with Direct Character Education Instruction scale, .645 with Creating Caring & Engaging Climate scale, .704 with Responsible Discipline scale, .662 with Teaching Character Skills in Action scale, but only .348 with Student Performance Character Scale, .010 (not significant) with Student Moral Character scale, and .018 (not significant) with Assessment of Ethical Learning Community scale. Similarly, Teaching Character Skills in Action scale has a correlation of .662 with Teaching for Diligent and Capable Performance scale, .747 with Direct Character Education Instruction scale, .572 with Creating Caring & Engaging Climate scale, .687 with Responsible Discipline scale, but only .320 with Student Performance Character Scale, -.026 (not significant) with Student Moral Character scale, and .196 with Assessment of Ethical Learning Community scale.

Thus, the observed patterns of results correspond well to the theoretically expected pattern of relationships and provide evidence of simultaneous convergent and discriminant validity of the instrument. Together with strong evidence of predictive validity, these findings help establish construct validity of the original scales developed for this instrument.

## Scale Descriptions

### The CREE Student Form includes:

#### I. Responsibility for Self: Performance Character

1. Performance Character consists of 12 items with reliability alphas of .71-.75, combining items from the Responsibility, Perseverance, Effort scale from GoodSport Youth Development questionnaire (GYD, Davidson & Khmelkov, 2003) and additional items tapping into other aspects of performance character, such as diligence, self-discipline, self-evaluation.
2. Preference for Cooperative Learning consists of 4 items with reported reliability alphas over .80 from the 2000 Program for International Student Assessment [PISA] and the Educational Longitudinal Study of 2002 [ELS] (developed for PISA by Marsh et al., 1999); Preference for Competitive Learning consists of 3 items with reliability over .80 from PISA/ELS (developed by Owens and Barnes, 1982, 1992).
3. Subject-specific Intrinsic Interest Scales consist of 4 items each for reading, writing, and math. They were adapted as a combination of items used in the 2000 Program for International Student Assessment [PISA] and the Educational Longitudinal Study of 2002 [ELS] (from Baumert et al., 1998, see also Peschar et al., 1999) and items developed by the authors for the GoodSport Youth Development questionnaire (GYD, Davidson & Khmelkov, 2003).
4. Subject-specific (math) Self-Efficacy Scale consists of 4 items with reliability alphas over .78 from PISA and ELS (from the original MSLQ, Pintrich et al., 1993).

#### II. Responsibility for Self: Moral Character

5. Moral Character consists of 11 items with reliability alpha of .76).

#### III. Responsibility for Others: Ethical Learning Community

6. Collective Responsibility in Learning consists of 4 items from GYD with reported reliability alphas of .72-.73.
7. Acceptance of Differences in Peers & Attachment to the School/Classroom Community consists of 8 items from the Global Portraits of Social and Moral Health (Davidson and Khmelkov, 2002), with reported reliability alphas of .73-.89.
8. Collective Responsibility in the School/Classroom Community consists of 8 items from the Global Portraits (Davidson and Khmelkov, 2002), with reported reliability alphas of .81-.83.

**IV. Experiences of Learning the Strengths of Character**

9. Student Experiences of Learning Performance Character in School consists of 11 items, with reliability alphas of .72-.74.
10. Student Experiences of Learning Performance Character at Home consists of 16 items, with reliability alphas of .88-.90.
11. Student Experiences of Learning Moral Character in School consists of 14 items with reliability alphas of .88-.91.
12. Student Experiences of Learning Moral Character at Home consists of 14 items with reliability alphas of .91-.93.

**The CREE Teacher Form includes:**

**I. Assessment of Student Performance and Moral Character**

1. Assessment of Student Performance Character consists of 12 items with reliability alpha of .91.
2. Assessment of Student Moral Character consists of 8 items that are parallel to items in the student moral character scale with reliability alphas of .78-.80.

**II. Assessment of the Ethical Learning Community**

3. Student Collective Responsibility in Learning consists of 4 items.
4. Student Acceptance of Differences in Peers & Attachment to Classroom/School Community consists of 8 items with reliability alphas of .78-.82.
5. Student Collective Responsibility in Classroom/School Community consists of 8 items with reliability alpha of .85.

**III. Professional Ethical Learning Community**

6. Leadership scale consists of 10 items (reported reliability alpha=.91) from the Schools and Staffing Survey [SASS] (see Tourkin et al, 2004).
7. PELC—Collective Responsibility consists of 12 items with reliability alphas of .77-.83.

8. PELC—Personal Responsibility consists of two subscales a) Personal Responsibility for continuous self-development (alphas=.75-.85) and b) Voice and Carefrontation (alphas=.81-.88).

#### **IV A. Teaching the Strengths of Character: Practices Promoting Performance Character**

9. Teaching for Diligent and Capable Performance consists of 14 items with reliability alphas of .80-85.
10. Teaching for Understanding consists of 9 items with reported reliability alphas over .81 (Khmelkov, Power, and Power, 2001; adapted from the original pool of items in Bidwell et al, 1997).

#### **IV B. Teaching the Strengths of Character: Practices Promoting Moral Character**

11. Direct Character Education Instruction consists of 6 items from Global Portraits with reliability alphas of .72-77.
12. Responsible Discipline consists of 6 items from Global Portraits plus 6 new items with reliability alphas of .83-.88.
13. Teaching Character Skills in Action consists of 6 items from Global Portraits with reliability alphas of .80-.81.
14. Creating Caring and Engaging Climate consists of 4 items with reliability alphas over .75-.88.

#### **V . Personal Teaching Efficacy in Promoting Performance & Moral Character**

15. Personal Efficacy in Teaching Performance Character (alpha=.96).
16. Personal Efficacy in Teaching Moral Character: (alpha=.98).
17. Teachers' Sense of Efficacy Scales (OSTES) by Tschannen-Moran and Woolfolk Hoy (2001).
  - Factor 1: Efficacy for instructional strategies (alpha=.91)
  - Factor 2: Efficacy for classroom management (alpha=.90)
  - Factor 3: Efficacy for student engagement (alpha=.87).

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