Appendix A

Table A1

Synthesis of Research on Teacher Beliefs

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Woolfolk, Hoy	1990	1. Teacher efficacy 2. Control of students 3. Motivation	Quantitative with correlations and multiple regression	N=182 preservice teachers	1. Teachers with high personal and teaching efficacy were more humanistic
Henson, Chambers	2002	1. Personality type 2. Teacher efficacy 3. Teacher beliefs*	Quantitative Principal component factor analysis, canonical correlations	N=120 preservice teachers	1. Extroverted personalities less controlling in student management 2. Extroversion positively correlated with teacher efficacy
Cohen, Amidan	2004	1. Personal history of discipline 2. Self-perception of classroom discipline	Quantitative: Surveys analyzed with descriptives and correlations	N=172 new teachers	1. Teachers with direct teaching styles were more likely male and low reward. 2. High reward and age of student were most significant predictors of indirect teaching style
Reeve, Jang, Carrell, Jeon, Barch	2004	1. Training in autonomy-supportive behaviors	Experimental design – control groups and random assignment; Observations, ANCOVA	N=20 high school teachers	1. Professional development increased autonomy-supportive teacher behaviors 2. Autonomy-supportive teacher behaviors increased student engagement.

Table A1 (continued)

Ritter & Hancock	2004	1. Teacher certification 2. Teacher experience 3. Classroom management style	Mixed methodology with surveys, observations, and interviews analyzed with descriptives and ANOVA	N=158 middle school teachers	1. Type of certification and experience do not correlate with classroom management style 2. Experienced, traditionally-certified teachers are non-interventionists in instructional management
Martin, Yin, & Mayall	2006	1. Classroom management training 2. Teaching experience 3. Gender 4. Teacher beliefs*	Quantitative Analysis of covariance	N=163 teachers	1. Female teachers more controlling 2. Teachers with CR management training were less controlling of student behavior 3. Teachers w/more experience were more controlling in instruction
Rimm-Kaurman, Storm, Sawyer, Pianta, LaPaaro	2006	1. Degree of implementation of Responsive classroom 2. Teaching experience	Quantitative: Survey analyzed with criterion method and factor analysis	N=197 teachers	1. Professional development increased degree of implementation of *Responsive Classroom* practices 2. Teacher Belief Q-Sort a reliable measure of teacher beliefs.

Table A2

Synthesis of Research on Collective Teacher Efficacy

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Goddard & Goddard	2000	1. Collective efficacy 2. SES, school size 3. Minority enrollment 4. Student achievement 5. Teacher efficacy*	Quantitative: Survey and achievement data analyzed with HLM; ANOVA	N=47 elementary schools	1. Collective efficacy had a positive correlation with teacher efficacy 2. All variance in teacher efficacy was explained by collective efficacy
Goddard	2001	1. Collective efficacy 2. Student demographics 3. Student achievement*	Quantitative: Survey and student achievement analyzed with HLM	N=91 elementary schools	1. Prior achievement predicted CTE 2. Collective efficacy independently predicted student achievement. 3. Group mean measure a more accurate measure of collective efficacy
Tschannen-Moran	2001	1. School climate 2. Collective efficacy 3. Faculty trust 4. Conflict management initiative*	Mixed Methodology: Survey, document, and interview data analyzed by descriptive statistics and correlations	N=50 high schools	1. Greater implementation of conflict management initiative resulted in improved school climate index, greater collective efficacy, and greater trust in principal, teachers, parents, and students.
Hoy, Sweetland, & Smith	2002	1. Collective efficacy 2. Academic press 3. SES 4. Math achievement*	Quantitative: Surveys and student achievement data analyzed with correlations and multiple regression.	N=97 high schools	1. Academic press a positive predictor of student achievement, controlling for SES; collective efficacy was stronger. 2. SES and CTE independently predict student achievement; SES and academic press indirectly predict through CTE

Table A2 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Gage (Dissertation, Ohio State University)	2003	1. Trust 2. Enabling school structure 3. Collective efficacy 4. Mindfulness*	Quantitative Surveys were analyzed with principal factor analysis, descriptive statistics, and partial correlations.	N=75 middle schools	1. Collective efficacy independently and significantly correlated to school mindfulness. 2. Faculty trust in clients correlated dependently to school mindfulness through collective efficacy.
Goddard, LoGerfo, & Hoy	2004	1. Collective efficacy 2. SES, school size, minority enrollment, urbanicity, school 3. Prior student achievement 4. Student achievement*	Quantitative: Surveys and student achievement data analyzed with descriptives, correlations, ANOVA, and Structural Equation Modeling	N=96 high schools	1. Collective efficacy is a positive predictor of student achievement, controlling for all other variables. 2. Prior student achievement is a positive predictor of collective efficacy 3. High SES positively predicts collective efficacy
Ross, Hogaboam-Gray, & Gray	2004	1. Collaborative school processes 2. Prior student achievement 3. Collective efficacy*	Quantitative: Surveys and student achievement data nalyzed with variance, Structural Equation Modeling, and Chi-square goodness of fit	N=141 elementary schools	1. Collective efficacy correlated with collaborative school processes and prior student achievement. 2. The latent variable, School Cohesion and Support, was a stronger predictor of collective efficacy than Teacher Ownership of School Processes 3. Prior student achievement positively predicted collective efficacy, but collaborative school processes was a stronger predictor.

Table A2 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Tschannen-Moran & Barr	2004	1. Collective teacher efficacy 2. SES 3. Student achievement*	Quantitative: Surveys and student achievement data analyzed with correlations and multiple regression	N=66 middle schools	1. A positive correlation was found between collective efficacy, including the subscales of instruction and discipline, and all tests of student achievement 2. Controlling for SES, collective efficacy was an independent predictor of only writing.
Tartar & Hoy	2004	1. Enabling school structure 2. Trust 3. Collective efficacy 4. SES 5. Politics 6. Student achievement* 7. Sch. effectiveness*	Quantitative: Surveys and student achievement data were analyzed by examining descriptives and intercorrelations, followed by multiple regression	N=145 elementary schools	1. Collective efficacy, SES, and enabling school structures had a strong independent relationship to student achievement.
McGuigan Dissertation, Ohio State University	2005	1. Collective efficacy 2. Trust 3. Academic emphasis 4. Enabling bureaucracy 5. SES 6. Student achievement*	Quantitative: Survey and student achievement data analyzed using correlations and multiple regression	N=40 elementary schools	1. Enabling bureaucracy demonstrated a significant positive correlation with academic optimism. 2. Value-added student achievement was not significantly correlated with academic optimism. 3. SES showed a significant positive correlation with academic optimism.

Table A2 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Tschannen-Moran & Barr	2004	1. Collective teacher efficacy 2. SES 3. Student achievement*	Quantitative: Surveys and student achievement data analyzed with correlations and multiple regression	N=66 middle schools	1. A positive correlation was found between collective efficacy, including the subscales of instruction and discipline, and all tests of student achievement 2. Controlling for SES, collective efficacy was an independent predictor of only writing.
Tarter & Hoy	2004	1. Enabling school structure 2. Trust 3. Collective efficacy 4. SES 5. Politics 6. Student achievement* 7. Overall effectiveness*	Quantitative: Surveys and student achievement data were analyzed by examining descriptives and intercorrelations, followed by multiple regression	N=145 elementary schools	1. Collective efficacy, SES, and enabling school structures had a strong independent relationship to student achievement.
McGuigan Dissertation, Ohio State University	2005	1. Collective efficacy 2. Trust 3. Academic emphasis 4. Enabling bureaucracy 5. SES 6. Student achievement*	Quantitative: Survey and student achievement data analyzed using correlations and multiple regression	N=40 elementary schools	1. Enabling bureaucracy demonstrated a significant positive correlation with academic optimism. 2. Value-added student achievement was not significantly correlated with academic optimism. 3. SES showed a significant positive correlation with academic optimism.

Table A2 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Goddard & Skria	2006	1. Student ethnicity 2. SES 3. Teacher gender and years of experience 4. Student achievement 5. Collective efficacy*	Quantitative: Survey, demographic, and student achievement data analyzed with hierarchical linear modeling and one-way ANOVA	N=41 K-8 schools	1. Researchers found a significant variation in collective efficacy among schools; minority teachers and experienced teachers had stronger collective efficacy 2. Reading achievement, number of students in gifted program, and number of Hispanic teachers on the faculty were found to be strong predictors of collective efficacy 3. SES was not a predictor of collective efficacy
Hoy, Tartar, & Hoy	2006	1. Collective efficacy 2. Faculty trust 3. Academic emphasis 4. SES, urbanicity 5. Prior student achievement 6. Student achievement*	Quantitative: Surveys were analyzed with descriptive statistics, hierarchical linear modeling, ANOVA, factor analysis, path analysis, chi-square goodness of fit, and RMSEA	N=96 high schools	1. Academic optimism was found to be a construct comprised of collective efficacy, faculty trust, and academic emphasis. 2. Prior student achievement directly and indirectly (through academic optimism) correlated to student achievement. 3. Academic optimism correlated directly to student achievement.

Table A3

Synthesis of Research on Trust

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Hoy, Smith, & Sweetland	2002	1. Institutional vulnerability 2. Collegial leadership 3. Professional teacher behavior 4. Achievement press 5. Faculty trust *	Quantitative: Surveys were analyzed using correlations and multiple regression	N=97 high schools	1. Professional teacher behavior significantly and independently predicted faculty trust in colleagues. 2. Collegial leadership significantly and independently predicted faculty trust in the principal. 3. Achievement press significantly and independently predicted faculty trust in clients.
Gage (Dissertation, Ohio State University)	2003	1. Trust 2. Enabling school structure 3. Collective efficacy 4. Mindfulness*	Quantitative Surveys were analyzed with principal factor analysis, descriptive statistics, and partial correlations.	N=75 middle schools	1. Faculty trust in clients correlated dependently to school mindfulness through collective efficacy. 2. Faculty trust in the principal correlated dependently to school mindfulness through enabling school structures.
Hartzler (Dissertation, Oklahoma State University)	2003	1. Collaboration 2. Faculty trust* 3. Parent trust*	Quantitative Surveys were analyzed with descriptive statistics, correlations, and multiple regression	N = 79 schools, random sample	1. Positive correlations between collaboration and faculty trust; positive correlations between faculty trust and parent trust 2. Faculty trust (all 3) predicted by collaboration in instructional decisions 3. Parent trust predicted by teacher-perceived parental influence.

Table A3 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Tarter & Hoy	2004	1. Trust 2. Enabling bureaucracy 3. Collective efficacy 4. Politics 5. Student achievement* 6. Overall effectiveness*	Quantitative: Surveys and student achievement data were analyzed by examining descriptives and intercorrelations, followed by multiple regression	N=145 elementary schools	1. Collective efficacy, SES, and enabling school structures had a strong independent relationship to student achievement. 2. Collective trust and politics had a strong independent relationship to overall effectiveness.
McGuigan Dissertation, Ohio State University	2005	1. Collective efficacy 2. Trust 3. Academic emphasis 4. Enabling bureaucracy 5. St.achievement*	Quantitative: Survey and student achievement data analyzed using correlations and multiple regression	N=40 elementary schools	1. Enabling bureaucracy demonstrated a significant positive correlation with academic optimism. 2. Value-added student achievement was not significantly correlated with academic optimism. 3. SES showed a significant positive correlation with academic optimism.
Smith & Birney	2005	1. School size 2. SES 3. Faculty Trust Teacher protection* 4. Student bullying*	Quantitative: Surveys were analyzed with correlations and multiple regression	N=106 elementary schools	1. Trust in the principal significantly correlated with trust in clients and colleagues; collegial trust significantly correlated with client trust. 2. Collegial trust correlated negatively with study bullying and positively with teacher protection. 3. Client trust and SES had strong independent correlations with school bullying.

Table A3 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Hoy, Tartar, & Hoy	2006	1. Collective efficacy 2. Faculty trust 3. Academic emphasis 4. SES, Urbanicity 5. Prior student achievement 6. Student achievement*	Quantitative: Surveys were analyzed with descriptive statistics, hierarchical linear modeling, ANOVA, factor analysis, path analysis, chi-square goodness of fit, NFI, CFI, and RMSEA	N=96 high schools	1. Academic optimism, a latent variable, was found to be a construct comprised of collective efficacy, faculty trust, and academic emphasis 2. SES directly and indirectly (through academic optimism) correlated to student achievement. 3. Prior student achievement directly and indirectly (through academic optimism) correlated to student achievement. 4. Academic optimism correlated directly to student achievement.

Table A4

Synthesis of Research on Academic Emphasis

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Hoy, Sweetland, & Smith	2002	1. Collective efficacy 2. Academic press 3. SES 4. Math achievement*	Quantitative: Surveys and student achievement data analyzed with correlations and multiple regression.	N=97 high schools	1. Academic press was a positive predictor of student achievement, controlling for SES, but collective efficacy was stronger. 2. SES and collective efficacy independently predict student achievement; SES and academic emphasis indirectly predict student achievement through collective efficacy 3. No significant correlation between SES and academic emphasis
Alig-Mielcarek Dissertation, Ohio State University	2003	1. Instructional leadership 2. SES 3. Academic press 4. Student achievement*	Quantitative: Surveys and student achievement data analyzed with descriptive statistics, correlations, principal axis factor analysis, and SEM	N=146 elementary schools	1. Instructional leadership is significantly positively related to student achievement in mathematics and to academic press. 2. Academic press: significant positive correlation with student achievement. 3. SES significantly correlated w/academic press & st.achievement- not to instructional leadership.
McGuigan Dissertation, Ohio State University	2005	1. Academic optimism 2. Enabling bureaucracy 3. SES 4. St. achievement*	Quantitative: Survey and student achievement data analyzed w/correlations and multiple regression	N=40 elementary schools	1. Enabling bureaucracy demonstrated a significant positive correlation with academic optimism. 2. Value-added student achievement was not significantly correlated with academic optimism. 3. SES showed a significant positive correlation with academic optimism.

Table A4 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Hoy, Tartar, & Hoy	2006	1. Collective efficacy 2. Faculty trust 3. Academic emphasis 4. SES 5. Urbanicity 6. Prior student achievement 7. Student achievement*	Quantitative: Surveys were analyzed with descriptive statistics, hierarchical linear modeling, ANOVA, factor analysis, path analysis, chi-square goodness of fit, NFI, CFI, and RMSEA	N=96 high schools	1. Academic optimism, a latent variable, was found to be a construct comprised of collective efficacy, faculty trust, and academic emphasis 2. SES directly and indirectly (through academic optimism) correlated to student achievement. 3. Prior student achievement directly and indirectly (through academic optimism) correlated to student achievement. 4. Academic optimism correlated directly to student achievement.
Bevans, Bradshaw, Miech, Leaf	2007	1. School demographics 2. Teacher demographics 3. Academic emphasis 4. Organizational health*	Quantitative Two-level hierarchical analysis	N=37 elementary schools	1. Academic emphasis correlated negatively with SES, student mobility, suspensions 2. Academic emphasis correlated positively with student attendance and student achievement

Table A5

Synthesis of Research on Enabling Bureaucracy

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Gage (Dissertation, Ohio State University)	2003	1. Trust 2. Enabling school structure 3. Collective efficacy 4. Mindfulness*	Quantitative Surveys were analyzed with principal factor analysis, descriptive statistics, and partial correlations.	N=75 middle schools	1. Measure of mindfulness was found to be valid and reliable. 2. Collective efficacy independently and significantly correlated to school mindfulness. 3. Faculty trust in clients correlated dependently to school mindfulness through collective efficacy. 4. Enabling school structures independently and significantly correlated to school mindfulness. 5. Faculty trust in the principal correlated dependently to school mindfulness through enabling school structures.
Tartar & Hoy	2004	1. Enabling structure 2. Trust 3. Collective efficacy 4. SES 5. Politics 6. Student achievement* 7. Overall effectiveness*	Quantitative: Surveys and student achievement data were analyzed by examining descriptives and correlations, followed by multiple regression	N=145 elementary schools	1. Collective efficacy, SES, and enabling school structures had a strong independent relationship to student achievement. 2. Collective trust and politics had a strong independent relationship to overall effectiveness.

Table A5 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Sinden, Hoy, & Sweetland	2004	1. Enabling school structures 2. Hindering school structures 3. Centralization 4. Formalization	Qualitative: Interviews analyzed with objectivist grounded theory, coding to identify themes	N=27 participants from 6 schools	In schools with enabling structures: 1. Rules were flexible. 2. Schools were small, rural, and informal. 3. Principals were supportive, open, professional. 4. Teachers were informal, supportive, trusting.
McGuigan Dissertation, Ohio State University	2005	1. Collective efficacy 2. Trust 3. Academic Emp. 4. Enabling bureaucracy 5. SES 6. St. achievement*	Quantitative: Survey and student achievement data analyzed using correlations and multiple regression	N=40 elementary schools	1. Enabling bureaucracy demonstrated a significant positive correlation with academic optimism. 2. Value-added student achievement was not significantly correlated with academic optimism. 3. SES showed a significant positive correlation with academic optimism.
Hoy, Tartar, & Hoy	2006	1. Collective efficacy 2. Faculty trust 3. Academic emphasis 4. SES, Urbanicity 5. Prior student achievement 6. St. achievement*	Quantitative: Surveys were analyzed with descriptive statistics, HLM, ANOVA, factor analysis, path analysis, chi-square goodness of fit, NFI, CFI, and RMSEA	N=96 high schools	1. Academic optimism found a construct comprised of collective efficacy, faculty trust, and academic emphasis 2. SES directly and indirectly (through academic optimism) correlated to student achievement. 3. Prior st. achievement directly and indirectly (through academic optimism) correlated to st. achievement. 4. Academic optimism correlated w/ student ach.

Table A6

Synthesis of Research on Mindfulness

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Gage Dissertation, Ohio State University	2003	1. Trust 2. Enabling school structure 3. Collective efficacy 4. Mindfulness*	Quantitative Surveys were analyzed with principal factor analysis, descriptive statistics, and partial correlations.	N=75 middle schools	1. Measure of mindfulness was found to be valid and reliable. 2. Collective efficacy independently and significantly correlated to school mindfulness. 3. Faculty trust in clients correlated dependently to school mindfulness through collective efficacy. 4. Enabling school structures independently and significantly correlated to school mindfulness. 5. Faculty trust in the principal correlated dependently to school mindfulness through enabling school structures.
Hoy, Gage, & Tarter	2006	1. Mindfulness* 2. Faculty trust	Quantitative Correlations, multiple regression, factor analysis	N= 75 middle schools	1. Faculty trust in colleagues and principal explained 94% of variance in school mindfulness 2. Faculty trust in principal explained 94% of variance in faculty mindfulness

Table A7

Synthesis of Research on Professional Development

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Flannery, Liau, Powell, Vesterdal, Vazsonyi, Guo, Atha, & Embry	2003	1. Peacebuilders Program 2. Aggressive behavior* 3. Social competence*	Mixed methodology: Surveys and Interviews in a longitudinal experimental design Surveys were analyzed with descriptive statistics and hierarchical linear modeling	N=8 elementary schools (134 teachers; 1959 students)	1. Statistically significant improvements in teacher-rated K-2 social competence and in student-rated grades 3-5 peace-building were found in first year 2. In Year 1, a statistically significant reduction in Grades 3-5 aggressive behavior was found. 3. In addition, Year 2 data showed an increase in K-2 prosocial behavior.
Abrami, Poulsen, & Chambers	2004	1. Teacher demographic data 2. Teacher perceptions of value, cost and expectancy	Quantitative: Surveys were analyzed with descriptive statistics, ANOVA, and multiple regression	N = 1031 teachers	1. Teachers use cooperative learning if: (a) They have high efficacy; (b) They believe they understand it; (c) They believe their students have the skills for effective teamwork
Denbow Dissertation, University of Missouri	2004	1. School culture (6 factors) 2. Implementation of character education (10 factors)*	Mixed methodology: Surveys were analyzed with correlations and backward elimination multiple regression; Follow-up interviews were used to verify results of quantitative analysis	N=204 teachers in 10 elementary schools	1. All correlations statistically significant. 2. School culture's Collaborative Leadership, Unity of Purpose, and Learning Partnership predicted Staff Development; school culture's Professional Development significantly predicted Experiential Learning, Adult Role Models, and Student Involvement.

Table A7 (continued)

Author	Date	Variables studied; * Dependent variable	Type of study; Data sources and analysis	Sample size	Findings
Yeager, Jr. Dissertation, Texas A&M University	2004	1. Capturing Kids' Hearts staff development 2. Teacher-student relationships* 3. Student engagement* 4. Discipline*	Mixed methodology Surveys were analyzed with descriptive statistics; open-ended responses were analyzed with identification of themes. Teacher focus groups were used to explain findings.	N=25 teachers and 264 students in one middle school	1. Mean scores for teachers increased, with significant increase in student achievement (a subset of student engagement). 2. Mean scores for students decreased, with significant decreases in teacher-student relationships and collaboration 3. Only 8th gr. students showed increases in attentiveness and achievement.
Attwood Dissertation, North Carolina State University	2005	1. "Banking Time" classroom management strategy 2. Teacher-student relationships* 3. Student behavior* 4. Time spent on instruction*	Mixed methodology case study, experimental design. Surveys were analyzed with descriptive statistics; observations were quantified.	N=3 dyads of 1 elementary student and the teacher	1. Banking Time had no significant effect on Dyad 1. 2. In Dyad 2, the teacher reported increasing student behavior problems; the observer reported decreasing student behavior problems. 3. In Dyad 3, teacher reported improvement; observations showed minimal effect.
Reinke Dissertation, University of Oregon	2005	1. Rate of teacher praise* 2. Rate of classroom disruption* 3. Visual performance feedback	Qualitative Observations used the Classroom Check Up as data recording tool	N=4 elementary classroom teachers	1. After feedback, specific teacher praise increased and classroom disruptions decreased. 2. Self-reported treatment integrity was greater than treatment integrity measured by observations 3. Praise regressed to previous levels one month later.