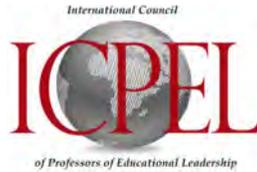


Examining Educational Leadership Dispositions: A Valid and Reliable Assessment of Leadership Dispositions

This manuscript has been peer-reviewed, accepted, and endorsed by the International Council of Professors of Educational Leadership (ICPEL) as a significant contribution to the scholarship and practice of school administration and K-12 education.



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Through a thorough review of research related to effective dispositional behaviors of educational leaders and with extensive input from subject matter experts, this research highlights twenty actionable behaviors associated with successful leadership in K-12 educational settings. The leadership dispositional behaviors identified in this study are indicative of promoting positive student outcomes, supporting the professional development of teachers, and creating positive work conditions for faculty and staff. The identification of leadership dispositions leading to performance-based growth and development in the discipline highlighted the need to address how postsecondary institutions can better prepare educational leadership candidates using sound measures. Adding to the body of educational leadership research, the Educational Leadership Disposition Assessment tool (EDLDA) was developed in this study using a systematic analysis of dispositional performance expectations in the discipline. The methodology for this research includes an extensive summary of steps taken to develop the EDLDA. Additionally, the psychometric evaluation of validated dispositional behaviors with calculated reliability estimates is presented in this research. Lastly, evidence of construct validity is also provided by aligning the validated dispositions with quality standards of the profession.

Keywords: *disposition assessment, educational leadership dispositions, dispositions in education*

If asked to describe what traits are characteristic of a good educational leader, it is very likely most individuals would agree that good leadership is characterized by trust, integrity, vision, respect, honesty, cooperation, and compassion. Most know what strong, effective educational leadership looks and feels like and it is evident when such attributes go awry. Ineffective leadership is toxic; it pollutes a work environment by engendering mistrust, suspicion, frustration, anger, and dishonesty. With a high expectancy for student academic achievement, the need for high-quality educational leaders is crucial in today's educational arena. Institutions of higher learning cannot risk graduating future school leaders who fail to possess the necessary dispositions for leading in the 21st century. The behaviors indicative of effective leadership, identifying them, and fairly assessing them are the focus of this work.

Effective school leaders are reported to have a strong and positive impact on the learning of the students under their leadership. Research, although scant, has begun to characterize specific traits and dispositions needed by school leaders to successfully lead a school, elicit respect from their staff, students and community, and positively impact student learning. For instance, in explaining the importance of Professional Standards for Educational Leaders (PSEL), the National Policy Board for Educational Administration (2018) suggested effective school leaders possess the ability to influence student learning by creating challenging learning environments that also provide supportive, caring, and compassionate conditions conducive to learning. Additional behaviors of strong leaders identified in the PSEL Standards include the ability to develop and support teachers, create positive work conditions, and engage in meaningful endeavors both in and outside of the classroom (National Policy Board for Educational Administration, 2018). In this paper, the authors define dispositions in general, develop an understanding of dispositions specific to the job of an educational leader, and then describe the development of the Educational Leadership Disposition Assessment (EDLDA).

The Challenge

Much of what is expected in the preparation of educational leaders have a direct implication with accreditation. As part of national and state accreditation requirements, educational leadership preparation programs are charged with tracking and monitoring the knowledge, skills, and dispositions of candidates. Teaching, tracking, monitoring, and assessing candidate subject matter knowledge of educational leadership, as well as their understanding of the practicality of school leadership, are expected as part of the educational leadership certification process. Therefore, most institutions offering advanced educational leadership degrees have designed and use tools to measure a candidate's knowledge and skills based on state and national standards (Brewer, Lindquist, & Altemueller, 2011; Rea et.al, 2011; Rea et. al, 2017).

The research increasingly informs us that knowledge and skills within the profession simply are not sufficient to prepare educational leaders (Wallace, 2013). There is more to consider: dispositions. Schute and Kowal (2005) acknowledge the importance of the traditional focus in educational leadership programs in areas such as human resources, law, finance, and assessment. But they emphasize that the traditional preparation is not sufficient. Their research also stresses the importance of developing dispositions appropriate to the profession and supports the notion that possession and demonstration of the proper professional dispositions can ultimately determine career success as a school leader. A challenge for educational leadership programs is determining how to define and develop dispositions of effective school leaders as well as how to seamlessly integrate dispositional training into their programmatic framework using a valid and reliable

assessment to measure such development within candidates. To fulfill accreditation standards used in higher education, program faculty are challenged to develop or discover psychometrically sound tools for use in measuring the dispositional behaviors of candidates. Researchers in the field of educational leadership concur that there is a strong need for valid and reliable instruments to measure dispositions of educational leaders (Cooper & Green, 2015; Melton, Mallory, & Green, 2010; Pregot, 2015; Schulte & Kowa, 2005).

Dispositions Defined

Taylor and Wasicsko (2000) define disposition as the personal qualities or characteristics such as, interests, values, beliefs, attitudes, and modes of adjustments that are possessed by individuals. Borko, Liston, and Whitcomb (2007) took the definition a step further suggesting dispositions are connected to actions. They describe dispositions as a person's tendencies to act in a given manner reflecting their beliefs and values. Villegas (2007) concurred by defining dispositions as tendencies for individuals to behave in a manner based on their beliefs. Therefore, disposition defined in this work is described as a construct; an observable performance-based behavior indicative of a person's values or beliefs that are manifested in a given situation which is predictive of future patterns of behavior.

Are Dispositions Measurable?

There has been concern expressed as to whether measuring a construct is feasible. Although acknowledging the need for a valid and reliable measure of disposition in educational leadership programs, Lindahl (2009) questioned the viability of creating such a tool. Furthermore, Messick (1995) cautioned that the measurement of constructs may be difficult unless great care is taken in instrument development and score interpretation. Sechrest (2005) noted that constructs have no verifiable reality beyond the specifics of their definition and operations proposed for measuring them. For instance, it is easy to verify knowledge of a mathematical algorithm, such as adding two numbers to yield a sum. An accurate answer to the equation is evidence of knowing. With constructs, evidence of knowledge is not as obvious or exact. Instead demonstration of knowing usually results from an assessment that is based on a consensus of subject matter experts and not hard evidence (Johnston, Wilson, & Almerico, 2018). Miller, et.al. (2009) also expressed concern with the measurement of constructs and characterized the notion as a subjective phenomenon. What is needed in this type of research, they explained, is a clear definition of the construct and its parameters because the selection of items in the evaluation pool is guided by the definitions generated. Different definitions can lead to different sets of items and outcomes.

Even though the concerns are reasonable, rejecting the measurement of constructs would come at a great cost to social science researchers, therefore, moving forward with this type of work is laudable and doing so with caution becomes acceptable. This type of research is further supported by measurement standards established by the joint efforts of the American Psychological Association (2018), American Educational Research Association (2018), and National Council of Measurement in Education (2018). Together, these organizations created standards for the measurement evidences of validity to be considered during peer review. The standards suggest starting with a feasible definition of the construct followed by preferred methods of reaching construct consensus.

Analysis of Educational Leadership Dispositional Research

Walters, Marzano, and McNulty (2003) examined over 5,000 studies to determine the effects of leadership practices on student learning. Their research identified a considerable relationship between quality leadership and student achievement. They went on to delineate 21 specific leadership behaviors aligned to student learning, most of which were dispositional in nature. An important point made in their work was that just as leaders can have a positive impact on student learning, they can also have an equally negative impact based on their interactions within the P-12 setting. Therefore, it is imperative that educational leadership programs identify effective leadership dispositional qualities, assess candidate demonstration of them, and teach them programmatically (Brown, 2015). Leadership dispositions make a positive impact on student learning, therefore it is a professional responsibility to ensure they are addressed and assessed in educational leadership preparation programs (Johnston, Wilson, & Almerico, 2018).

Green, Chirichello, Mallory, Melton, and Lindahl (2011) noted that many educational leadership programs refer to the national professional standards when determining which dispositions to assess programmatically. Although the current national standards for educational leadership programs (NELPS) does not specifically delineate dispositions in nature, professional dispositions are characterized in Standard 2: Ethics and Professional Norms, Standard 3: Equity, Inclusiveness, and Cultural Responsiveness, and Standard 5: Community and External Leadership and can be used as a guide for school leadership preparation.

Literature includes several operational definitions and characteristics of effective leadership dispositions. For example, Wasonga and Murphy (2007) enumerated a listing of eight important educational leadership dispositions: active listening, resilience, egalitarianism, collaboration, cultural anthropology, trustworthiness and trust, patience, and humility. Martin (2008) identified dispositions of strong leadership embedded in four domains: relationships, moral and ethical dimensions, work habits and professional demeanor, and intellectual integrity. Specifically, she identified the dispositions of effort, cooperation, and collaboration, being open-minded, self-awareness, and receptivity to unique ideas and styles. Helm (2010) identified five crucial dispositions for school leaders: courage, integrity, caring, strong work ethic, and the ability to think critically. He also emphasized the importance of school leaders' remembering what it was like to be a teacher and to keep this recollection in mind as they carry out their duties.

Green and Cooper (2013) suggested that principals would be well advised to develop and sustain supportive and positive relationships with teachers. According to their research, the relationship existing between principals and teachers have a greater influence on school culture and student achievement than any other element associated with the school. Through a meta-analysis of dispositional research in educational leadership, they identified 49 most frequently referenced dispositions describing effective educational leaders. Their research was conducted in three phases (1) surveying the literature to identify dispositions; (2) surveying school leaders to narrow down the list to preferred dispositions; and (3) asking subject matter experts to rank order the dispositions based on essentialness to the profession. Their research identified six dispositions most preferred by today's school leaders: character, communication, ethics, integrity, trust, and vision.

Methodology

The goal of this study was to operationalize educational leadership dispositions validated in the research to determine the meaning of each and to create an instrument to assess candidate dispositions in educational leadership programs. The methodology for this study was mixed methods and, in part, replicates the process described in Green and Cooper's (2013) work. Our work for this study was completed in several phases as described in subsequent sections of this paper. In all, data collection included the dissemination of two online surveys, with a response rate of 89% and several focus group discussions with leaders, practitioners, and experts in the field of educational leadership.

Selection of Participants

Solicitation for participation was extended to educational leadership practitioners in a public school district in the southeastern region of the United States, candidates in a Master's of Educational Leadership program in a mid-sized liberal arts university, and experts in the field at a fall Council for the Accreditation of Educator Preparation (CAEP) conference. Participation qualifications included having experience in educational leadership either as a school leader, district leader, teacher leader, professor of educational leadership, or candidate currently enrolled in an educational leadership program. Data collection included several phases, of which participants were notified that their participation was voluntary.

Phase One

The investigators reviewed the most recent literature to identify behaviors of educational leadership dispositions and identified 38 frequently referenced dispositions of effective school leaders. To further test the validity of the 38 dispositions, the researchers disseminated an online survey to subject matter experts (N = 33) asking them to rate the essentialness of each disposition in relation to educational leadership. The ratings were on a Likert scale of 1 to 4, with 1 meaning, not representative; 2 indicating somewhat representative; 3 indicating representative, and 4 reflecting that the behavior was essential to the identified disposition. In addition to a Likert rating for each disposition, the survey also included fields for additional comments. Based on survey results, dispositions with a mean score of 3.5 or less were eliminated. Additionally, open-ended responses from the survey suggested noticeable areas of repetitiveness between certain dispositions. Based on survey data and feedback, the list was reduced to 28 dispositions. The researchers then advanced their work by conducting an extensive literature review to operationalize the list of 28 by including descriptive language to illustrate each disposition. With a list of 28 dispositions and a set of descriptive behaviors for each, the researchers conducted another validity check, which is discussed in phase two.

Phase Two

The next phase of data collection involved disseminating a second online survey to receive large scale feedback from educational leadership practitioners regarding the 28 identified dispositions and associated descriptive behaviors. The online survey, constructed using the Qualtrics platform, was disseminated to school leaders throughout a large metropolitan area in the southeastern region of

the United States and to participants attending a session at the 2018 fall CAEP conference (N = 130), which resulted in a 72% response rate. The anonymous survey asked participants to rate the degree to which each behavioral descriptor was representative of the prescribed disposition. The ratings were on a Likert scale of 1 to 4, with 1 meaning, not representative; 2 indicating somewhat representative; 3 indicating representative, and 4 reflecting that the behavior was essential to the identified disposition. Mean scores lower than 3.5 on a 4-point scale were eliminated. In addition to rating the essentialness, survey takers were also prompted to provide open-ended feedback. Based on responses, six dispositions were eliminated, resulting in 22 retained dispositions.

Phase Three

After eliminating behaviors due to statistical insignificance, as described in phase two, the researchers conducted a series of focus groups during phase three. The first focus group included 13 subject matter experts, who were asked to examine the 22 dispositions and associated behaviors using the Q-sort method. In small groups, participants discussed the dispositional behaviors and determined which disposition was the best fit for each associated behavior. Each small group presented their Q-sort results, which lead to a full group discussion regarding the validity of each of the 22 dispositions and behaviors. The focus group resulted in the elimination of six dispositions due to overlap and suggested that one disposition (develops meaningful relationships) should be added back to the list due to its significance in the role of being an effective educational leader.

The last focus group with subject matter experts (N = 5) involved a final review of the 22 dispositions and behaviors. This focus group did not engage in a Q-sort, however, their efforts included a thorough review and discussion of the dispositions and behaviors to determine the validity of each item. The researchers felt it was necessary to conduct an additional focus group because the five subject matter experts also volunteered to participate in the construction of the EDLDA (Educational Leadership Disposition Assessment) instrument. Qualitative data collected from this focus group resulted in the elimination of eight dispositions (because they were already mentioned in the descriptive behaviors in other areas) and the addition of one disposition, resulting in fifteen dispositions. The research team collaborated with the five subject matter experts to construct the EDLDA instrument which includes a three-point rubric with fifteen dispositions and descriptive language to describe each disposition.

Interrater Reliability

Interrater reliability was conducted using educational leadership professors in a Master's of Educational Leadership program in a mid-sized university located in the southeastern region of the United States. Using the EDLDA, two instructors rated a set of educational leadership candidates (N = 11) whom they had both instructed during the same semester. Both instructors are practitioners in the field of educational leadership with more than 20 years of experience in education. The correlation coefficient for each disposition is reflected in Table 2.

EDA Racial Bias, Gender Bias, and Ambiguity Examination

The research team also conducted a check for racial bias, gender, and ambiguity within the assessment with a group of experts (N=18). Subject matter experts included school district leaders, educational leadership faculty members, and one classroom teacher with a degree in educational

leadership. Participants were asked to review the dispositions on the EDLDA to identify any perceived racial bias, gender bias, and ambiguity on the assessment. Under the disposition “confidence”, participants identified “arrogance” as a subjective descriptor and suggested another word or phrase be used to communicate how overconfidence is a weakness in leadership. The bias and ambiguity test also illuminated questions from participants that warranted clearer language in the descriptors for integrity and adaptable. All other dispositional descriptors were free of racial bias, gender bias, or ambiguity.

Results and Findings

The results of the study resulted in fifteen dispositions essential to educational leadership. These data not only indicate that the dispositions are vital for educational leadership practitioners but also suggest that the identified dispositions and behaviors are essential for preparing candidates in educational leadership preparatory programs. An analysis of the data for each phase of the research is provided.

Based on a thorough analysis of the literature, 38 dispositions were initially identified as essential traits for educational leadership practitioners. Table 1 includes the 38 dispositions along with mean scores for phase one and phase two where subject matter experts were asked to rate the essentialness of each disposition on a 4-point Likert scale.

Table 1
Mean Scores for Educational Leadership Dispositions

Disposition	Phase One Mean Scores	Phase Two Mean Scores
Confidence	3.7	3.8
Persistent	3.7	3.7
Driven to learn	3.7	3.6
Develops meaningful relationships	3.6	3.4
Encourages active participation by all stakeholders	3.6	3.6
Conflict resolution	3.8	3.9
Trust	3.8	3.9
Confronts conflict for what is ethical	3.8	3.0
High expectations	3.8	3.6
Honesty (transparency)	3.7	2.8
Open communication	3.7	3.9
Accountable for one’s own behavior	3.7	3.7
Positive attitude	3.5	3.6
Vision	3.8	3.8
Integrity	3.7	3.6
Character	3.8	3.1
Creates a positive culture	3.8	3.8
Strong work ethic	3.8	3.7
Ability to think critically	3.7	3.3
Commitment	3.8	3.9
Fairness	3.5	3.1

Consistency	3.7	3.5
Inspires others to accomplish challenging work	3.9	3.8
Continuous improvement of professional behavior	3.7	3.7
Open to change	3.6	3.4
Self-aware of strengths and weaknesses	3.6	3.8
Embraces diversity	3.9	3.9
Possesses professional beliefs about schools, teaching, & learning	3.8	3.8
Risk-taker	3.2	
Flexible	3.3	
Seeks feedback	3.4	
Sees developing others as a priority	3.4	
Compassion	3.2	
Courage	3.4	
Selflessness	2.9	
Sense of humor	2.8	
Openness	2.9	
Individual dignity	3.2	

**Note: Dispositions with mean scores below 3.5 were not included in Phase Two.*

An analysis of the data collected during phase one resulted in a solid list of 28 leadership dispositions with mean scores ranging between 3.6 to 3.9. Dispositions dropped from the list due to low mean scores were: risk-taker; flexible; seeks feedback; sees developing others as a priority; compassion; courage; selflessness; sense of humor; openness; and individual dignity. Of those dropped, sense of humor had the lowest mean score of 2.8. When analyzing the retained dispositions, inspires others to do challenging work and embraces diversity were among the highest with a mean score of 3.9. Data collected during phase two involved a 2nd dissemination of an online survey to rate how well the associated behaviors connected with each identified disposition. Just as with phase one, behaviors with a mean score below 3.5 on a 4-point Likert scale were dropped.

After two rounds of validity checks as described in phases one and two and an extensive literature review to qualitatively define and describe each disposition using descriptive behaviors, the researchers conducted two focus groups with subject matter experts. Based on participant feedback, the research team used the qualitative data provided during the focus group discussions to refine the descriptive language used to operationalize each of the identified dispositions, resulting in the enhancement of the following dispositions: confidence, work ethic, adaptable, and positive attitude.

. Focus group discussions also resulted in the elimination of two dispositions: persistent and character. Based on participant feedback, persistent was eliminated because it aligned closely with determined. Participants also shared that persistent is widely subjective and could be interpreted negatively. Regarding character, participants acknowledged the importance of this disposition as critical for leadership development but shared that character is the essence of all identified dispositions and felt that it should not be added as a separate disposition, but instead is the undergirding of all dispositions. Participants also shared that character is closely aligned to integrity.

After developing descriptive language based on feedback from subject matter experts during the two focus group discussions, the researchers checked for interrater reliability. The correlation coefficients for each disposition are reflected in Table 2.

Table 2
Interrater Reliability Correlation Coefficients for Leadership Dispositions

Disposition	Coefficient
Confidence	0.81
Determined	0.81
Vision	0.90
Driven	0.90
Conflict Resolution	1.00
Embraces Diversity	0.81
Relational	0.90
High Expectations	0.81
Positive Attitude	0.72
Effective Communication	0.81
Integrity	0.81
Positive Culture	0.90
Work Ethic	0.72
Adaptable	0.72
Self-Aware	0.81

Implications

Principal retention is of great concern across the U.S. According to a 2017 national survey, approximately 18 percent of public school principals had left the career. Astoundingly, the turnover rate in high-poverty schools is even higher at 21 percent (Brown, 2015; Goldring & Taie, pg. 8). Because of the need to retain highly effective school leaders, proper preparation is vital for university educational leadership programs as well as school district leadership development efforts.

In regards to preparation for future school leaders, the significance of this work is two-fold. The development of the educational leadership disposition assessment, as discussed in this article, has implications for school leadership preparation programs who are vested in developing future school leaders with strong affective and professional qualities. If situated correctly, principal preparation programs can use this work to further enhance their curriculum and leadership development within their programs. For example, the EDLDA has been adopted and is currently used in three Masters in educational leadership programs across the United States. These programs currently use the assessment as a leadership development tool to help candidates develop and refine their dispositional attributes. Implementation and use of the EDLDA have been integrated into these educational leadership programs in the following ways:

- The EDLDA is introduced to all new candidates at the start of their coursework in the educational leadership program.
- Candidates complete an EDLDA self-assessment upon admission.
- Administrative mentors assess and coach candidates on the EDLDA throughout the course of their internship.
- Aspects of the EDLDA are integrated throughout courses, such as school law, human resources, and problem-solving and visionary leadership.

- Candidates complete a final self-assessment during their last semester along with a comparative analysis of their dispositional growth.

Furthermore, the implications of this work sit heavily with institutions either seeking or maintaining state and/or national accreditation, as preparing candidates for professional leadership dispositions is included in CAEP, NELP, and state standards. While we know possessing knowledge and skills are essential for effective leadership, this research further supports the importance of fully preparing candidates by reinforcing their dispositional capacity as future school leaders.

Lastly, the EDLDA can be used as a professional development tool in supporting school districts in their efforts to grow and develop new school leaders. Most, if not all, districts are guided by professional leadership competencies which include dispositional aspects (Welch & Hodge, 2018). For example, the 2015 Professional Standards for Educational Leaders (PSEL), formerly known as the Interstate School Leaders Licensure Consortium (ISLLC) standards, references professional dispositions in standard 2: ethics and professional norms, standard 3: equity and cultural responsiveness, standard 5: community of care and support for students, and standard 8: meaningful engagement of families and community (Carol & Young, 2013; National Policy Board for Education Administration, 2018).

Conclusion

Data collection resulted in the development of the Educational Leadership Disposition Assessment (EDLDA), which includes fifteen dispositions with indicators (descriptive behaviors) for each identified leadership disposition. The EDLDA is formatted as a rubric with three rating categories (meets expectations, developing, needs improvement). The value of this research strengthens the capacity for educational leadership preparation programs to train their candidates in professional dispositions. In addition to identifying dispositions essential for effective school leadership, this research also resulted in the development of an instrument with operational descriptors for each of the fifteen dispositions. Lastly, to ensure the EDLDA clearly assessed dispositions essential to the profession, the research team conducted an alignment of the dispositions to the National Educational Leadership Preparation Standards (NELPS) set forth by the National Policy Board for Educational Administration (2018).

In conclusion, issues regarding the retention rate of educational leader's nationwide points to the complexities, responsibilities, and relentless pressures of the job, which ultimately impact student achievement in the U.S. Ongoing support and professional development is needed at all levels of school leadership, whether it be at the pre-service level within university educational leadership programs, for novice practitioners, or for veteran school leaders. It is imperative that school leaders are fully developed and prepared to lead within a profession that continues to change drastically.

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