Using Comer's Developmental Pathways to Measure Student Disposition Jayne White, Ed.D., Edward Williamson, Ph.D., and Cynthia Bice, Ed.D. Drury University

The purpose of this paper is to provide background information on the development of a disposition evaluation instrument (DEI) at Drury University, document the foundation of the DEI upon the developmental pathways theory advocated by Dr. James Comer, provide for a discussion of issues related to the implementation and continuation of the DEI at Drury University, and report statistical findings regarding the administration of the DEI during the spring 2004 semester at Drury University in Springfield and St. Robert, Missouri.

Theoretical foundations

Drawing on a rich array of theoretical perspectives the disposition evaluation instrument (DEI) at Drury University reflects those influences that are especially pertinent to the unique environment of a liberal arts university. Theories emphasized by the authors include the affective domain, especially Bloom's Taxonomy, Krathwohl's Taxonomy for Affective Processes, Gardner's Multiple Intelligences Theory; emotional intelligence through the findings of Salovey and Goleman; Comer's Developmental Pathways Model; and Brain-Based Learning. While all of these theorists impacted the development of the DEI, the work of Dr. James Comer remains the primary thrust.

WRITE SOMETHING HERE ABOUT THE ORIGINAL AND THE REVISED Developmental pathways model

Dr. James Comer's model of educational reform is based on the assumption that meaningful school change results from the process of relationships and community building. Emphasis is placed on building positive relationships between and among relevant adults and children. In Comer's model, the school is a social system. If this social system is not working well, children do not develop well along the six developmental pathways: social, cognitive, physical, psychological, language, and moral/ethical. Comer believes that positive interpersonal relationships set the stage for addressing, or even preventing serious and deep-rooted developmental problems. Comer agrees with Goleman in referring to the role of the community

in shaping the culture of the school/classroom. He, too, contends that school should be a place where students feel safe and valued, or maximal development will not take place (1996).

According to Comer (1996):

All children are at risk today. More homes are broken, more are led by single mothers, and more have two parents away at work. For children to develop healthily well-functioning adults must be available and attentive to them at all times. In the SDP school, the adults work creatively and enthusiastically with each other and with the children, setting a powerful model for the children's attitudes toward school, society, and the future. (p. 42)

Comer believes it is the teacher's responsibility to create a receptive climate for learning that reflects the developmental needs of children. He further contends that preservice teacher preparation programs too often emphasize only three of the developmental pathways – language, cognitive, and physical. Yet, teachers encounter, on a daily basis children needing support and guidance along the "soft pathways" – social, psychological, & moral/ethical – because of the multitude of societal and familial issues they face (1996).

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According to Comer, "when children are developing well, they learn well" (1999, p. *xix*). The SDP has been used with great success in low-income schools with large percentages of minority students. While most of the school districts that have adopted the SDP are found in urban areas, the program has been implemented in suburban and rural

areas as well. At Drury University, the authors incorporate information about the SDP in all teacher education courses resulting in teacher education graduates who are well-founded upon the principles of the program, even if they teach in schools which have not formally adopted the SDP.

Schools are dynamically and continuously changing systems (Comer, 1993) serving students who are currently facing crisis-level issues ranging from academic achievement to psychosocial development. The Comer School Development Program is identified as a school reform project that focuses on both academic performance and behavior modification (Cook, Hunt, & Murphy, 1998). Significant results in the areas of school climate, classroom climate, academic achievement, school adjustment, and self-concept have been attributed to the Comer School Development Program (Comer & Emmons, in press).

Comer's developmental pathways

Dr. James Comer utilizes "a metaphor of six developmental pathways to characterize the lines along which children mature – physical, cognitive, psychological, language, social, and ethical" (Comer, Ben-Avie, Haynes, & Joyner, 1999, p. 3). The developmental pathways require a review of "the central core of teaching and learning, which is usually defined as curriculum and instruction (which has now been) expanded to include child development and relationships" (Gillette, 1995, p. 75). Teaching and learning must use child development as an educational foundation and relationships as the "vehicle for learning" (Gillette, 1995, p. 81) to provide an effective schooling experience. The complexity of the developing children requires that educators view them

in a holistic manner. The developmental pathways act as "a thread that makes sense by looking at its place in the whole tapestry" (Gillette, 1995, p. 79).

One of the most crucial areas of the SDP is that of the developmental pathways. Too often educators focus only upon the physical or cognitive development of children, and as we are aware, children of poverty frequently lag behind their peers in these areas. According to developmental pathways theory, children not only develop physically and cognitively, they also develop socially, ethically, linguistically, and psychologically. Educators must focus their attention upon each of these areas for children to develop well. The developmental pathways of Dr. Comer incorporate all of these areas: social, ethical, physical, cognitive, language, and psychological. Each of these is discussed below.

The Social Pathway

The social development of students is enhanced by healthy interpersonal relationships in a wide variety of social settings. Learning is a social enterprise and can be enhanced when students have the opportunity to work collaboratively on complex, structured group activities. Social development also implies the gaining of skills and expertise to be comfortable in varied social contexts (Comer, 1999).

The Ethical Pathway

The ethical development of students involves the ability to reason and make conscious decisions to behave in certain ways. Children develop ethically in the transition from distinguishing between desirable and undesirable behaviors to possessing the ability to understand ethical principles and using these principles to regulate their own actions

(Comer, 1999). Other research has been conducted on this phase of development by Kohlberg (1984) and Gilligan (1982).

The Physical Pathway

The physical development of students refers to the biological maturation of the child. It involves more than the obvious manifestations of size, shape, and physical characteristics. It also includes hand-eye coordination, dexterity, visual acuity, and auditory perception (Comer, 1999).

The Cognitive Pathway

The cognitive developmental pathway involves the capacity to think, plan, solve problems, and accomplish goals (Comer, 1999). Within this developmental pathway the child's ability to think and to use his or her mind to handle challenges is addressed. The cognitive component emphasizes flexibility of thought, the aptitude to manipulate information, and the skill to manipulate the environment (School Development Program, 2001).

The Language Pathway

The language developmental pathway builds the capacity for receptive and expressive language in a variety of contexts (Comer, 1999). Cognitive development is mediated through language. This pathway involves the ability to receive and express oneself through both spoken and written language (School Development Program, 2001).

The Psychological Pathway

The psychological developmental pathway involves self-confidence, self-esteem, the ability to gain control over individual feelings, and to accept oneself (Comer, 1999).

Increasing the capacity for acceptance and confidence in oneself during the ongoing

process of identity formation is the focus of the psychological pathway (School Development Program, 2001).

Efforts to create a disposition evaluation instrument at Drury University

Drury University, established in 1873 is a private, liberal arts university located in Springfield, MO. Drury University also has an extensive evening college division with locations in St. Robert, Fort Leonard Wood, Rolla, Lebanon, Cabool, Ava, Thayer, and Stockton, all in southern Missouri. Students are able to complete the Bachelor of Science in Education at the main campus in Springfield (through the regular day school, known as Drury College, or the evening division, known as the College of Graduate and Continuing Studies); or at the Mid-Missouri Region located in St. Robert, MO. Education courses are offered at all of the remaining evening college locations.

The School of Education and Child Development at Drury University consists of nine full-time tenure track faculty, several part-time faculty, and adjuncts. Four of the full-time tenure track faculty are based at the Mid-Missouri Region in St. Robert, MO. The School of Education and Child Development at Drury University certified 90 students to teach in Missouri during the 2003-04 school year.

Drury University is an NCATE accredited institution and subsequently follows the guidelines delineated by that organization. With the increasing emphasis by NCATE on student disposition, Drury University needed to be able to collect data relative to this. In the fall of 2001, the authors began collecting literature on student disposition and how to measure it. During the following year the authors collaborated on a paper that was accepted for presentation at the 2003 AACTE conference in New Orleans, LA (Williamson and White, 2003). In addition, one of the authors attended the 2002 NCATE meeting in Washington, DC.

Following the presentation at AACTE, the authors embarked on a process of refinement. During departmental meetings in the spring of 2003, the disposition evaluation instrument (DEI) was modified. Several of the faculty members field tested the DEI during the spring and summer semesters. Anecdotal evidence of these efforts is included in this paper. While the development of Drury University's DEI is an on-going process, the faculty of the School of Education and Child Development met in the summer of 2003 and gave final approval to the use of the original DEI. Faculty members were encouraged to use the instrument and to report back to the authors

with suggestions for modifications. The developers of the DEI maintain that it is a work in progress which will undoubtedly be modified and revised as needed through time. The following section details uses of the Drury University DEI during the 2003-04 academic year.

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DRURY UNIVERSITY SCHOOL OF EDUCATION AND CHILD DEVELOPMENT

DISPOSITION EVALUATION INSTRUMENT

Area 1 Relationships with Others	Sensitivity	Inclination	Ability	Application
Candidate possesses a sense of humor				
Candidate is willing to voice unpopular views				
Candidate cultivates and maintains extensive informal networks				
Candidate thinks clearly and stays focused under pressure				
Candidate acts ethically and is above reproach				
Candidate admits mistakes and confronts unethical actions in others				
Candidate seeks out relationships that are mutually beneficial				
Candidate takes tough, principled stands				
Candidate is attentive to emotional cues				
Candidate shows sensitivity and understands perspective of others				
Candidate builds rapport and keeps others in the loop				
Candidate offers and receives useful feedback and identifies the need for				
further growth				
Candidate mentors, coaches, challenges, and fosters skills in others				
Candidate increases satisfaction and loyalty				
Candidate makes and maintains personal friendships among associates				
Candidate offers appropriate assistance				
Candidate is effective in give and take, registers emotional cues, and				
attunes message				
Candidate spots potential conflict bringing disagreements into the open				
and de-escalates the conflict				
Candidate encourages debate and open discussion				
Candidate orchestrates win-win situations				
Candidate demonstrates an understanding of effective verbal and non-				
verbal communication by choosing language and delivery techniques				
appropriate to the audience				
Candidate models effective communication strategies in asking				
questions, listening, giving directions, probing for understanding and				
helping others to express their ideas				

Area 2 Reliability	Sensitivity	Inclination	Ability	Application
Candidate frequently creates his/her own opportunities in the				
classroom				
Candidate builds trust through reliability and authenticity				
Candidate meets commitments and keeps promises				
Candidate is on-time				

Area 3 Willingness to Collaborate	Sensitivity	Inclination	Ability	Application
Candidate seeks out fresh ideas				
Candidate actively seeks out opportunities to fulfill the group's				
mission				
Candidate mobilizes others				
Candidate helps out based on understanding other people's needs and				
feelings				

Area 4 Reflective Practice (including self-assessment)	Sensitivity	Inclination	Ability	Application
Candidate knows emotions				
Candidate realizes links between feelings				
Candidate recognizes that feelings affect performance				
Candidate has a guiding awareness of values and goals				
Candidate is aware of strengths and weaknesses				
Candidate holds self accountable				
Candidate adapts responses and tactics				
Candidate is results-oriented				
Candidate learns how to improve performance				
Candidate finds a sense of purpose in the larger mission				
Candidate operates from hope of success rather than feeling of failure				
Candidate sees setbacks as result of manageable circumstances not				
personal flaw				
Candidate is reflective and learns from experience				
Candidate uses the group's core values in choices and decisions				
Candidate understands diverse world views and is sensitive to group				
differences				

Area 5 Personal Appearance	Sensitivity	Inclination	Ability	Application
Candidate possesses self-assurance				
Candidate manages feelings and emotions				
Candidate is always well-groomed; appropriate dress				
Candidate is composed, positive, and unflappable				

Area 6 Teaching (including differentiation)	Sensitivity	Inclination	Ability	Application
Candidate respects and relates well to people of diverse backgrounds				
Candidate understands needs and matches needs to services or				
products				
Candidate challenges bias and intolerance				
Candidate is always prepared for lessons				
Candidate challenges authority				
Candidate continually seeks to improve professional skills and				
knowledge				