Planning to Change Student Behaviors in a Small City School District: A Case Study of Managing in the Effective Change Zone

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ABSTRACT

This article is a retrospective analysis of successful planning processes implemented in an urban school district in the Northeast United States to improve student behavior by incorporating positive behavior activities and strategies as well as infusing more specific character education into the curriculum. The results after three years of planning, implementing, and evaluating the program funded via a federal grant have been impressive. The planning and implementation approaches employed by the district for this program are consistent with those key "high-touch" approaches advocated by contemporary educational researchers and categorized in the planning literature as "managing in the effective change zone". Thus, this paper provides a case study of managing change in the "effective change zone" to promote meaningful and sustaining results.

INTRODUCTION

Urban school districts typically face a plethora of non-academic concerns that directly impact the achievement of students. In many cases, negative behavior of the student within the school or classroom has a doubly negative effect of preventing personal learning and the learning of others. School discipline, which has traditionally focused on a punitive model of punishment for wrongdoing (March, Hawken, & Green, 2003) has not been found to be particularly effective as punitive measures have been found to contribute to negative behavior and school environments which are considered unsafe and hostile (Mayer, 1995).

The faculty and administration of this relatively small urban school district, PreK-12 student population of approximately 7,500, identified negative behavior as a major barrier to student learning. Upon initial exploration, district stakeholders identified a lack of behavior and character education "curriculum" as a barrier to improving student behavior and resultant academic performance. A proactive and preventative approach to addressing student behavior was desired. As research regarding appropriate interventions for this particular concern progressed a combined 'positive-behavior/character education' model was initiated. Based on available research (Walker, Colvin, & Ramsey, 1995; Nelson, Colvin, & Smith, 1996), there was strong support for the use of a Positive Behavior Interventions and Supports (PBIS) model to effect change in the district.

The grant for which the district applied was solely for the purpose of improving individual student behavior from a 3-tiered PBIS model (Lewis & Sugai, 1999) that aimed at addressing the positive teaching and reinforcement of behavior across school-wide, classroom, and individual situations.

Program Implementation History – Year 1

Upon being awarded a federal grant the school district began the planning and program design phase of implementation. The entire 1st year of the program was directed toward allowing staff, administrators, and other stakeholders meaningful amounts of time to design, develop, and articulate program goals, policy, and procedures. This meaningful amount of time allowed for the essential "buy-in" among program originators as well as

staff members and school personnel that were not directly responsible for program development and/or the dissemination of program details.

Year 1 resulted in over 100 hours of professional time spent developing universal district matrices for what appropriate positive behavior and character education program would "look like" as implemented. It also provided for individual schools to consider their own school culture and create a series of recommendations and modifications to the universal system that would facilitate increased acceptance and implementation of the program. A non-exhaustive list of products developed from the year of planning included: 1) district-wide behavioral matrices that specifically defined positive behavior in every physical area of the school (e.g. cafeteria, bathroom, hallway); 2) a schedule that teachers would follow in reinforcing students for overt displays of positive behavior; 3) a series of character traits assigned on a 10-month rotation that would be focused on for the noted month; 4) literary and instructional resources that could be used by teachers for planning lessons that incorporated the specific character trait for any given month; 5) artifacts that teachers and other school personnel could use for supporting the program within the school or classroom (e.g. signs, tickets for reinforcement).

Program Implementation History – Year 2

Year 2 consisted of program implementation based on the aforementioned program developed within Year 1. A full time school counselor was assigned to work directly with staff within the experimental school buildings. Regular "walk-throughs" of the schools were used as means for repeated evaluation of the integrity and fidelity of program implementation. Staff surveys were completed after the first few weeks of school to determine a baseline of student behavior and perceptions of school as a positively engaged community. Consultation from a nationally recognized positive behavior/character education specialist was employed to determine if programming was appropriate, effective, desirable, and had potential for continuation.

Also during year 2, data were continuously collected by an independent data-analysis and program evaluation firm. Measures of office referrals, student suspensions, violent and disruptive incidents, staff perceptions of school as a caring community, and student perceptions of school as a caring community were all collected throughout the year for review and analysis.

The summer of Year 2 was spent reviewing results of collected data regarding program implementation, perceptions, and success. Given the constructivist nature of the designed program a multi-disciplinary team of educators gathered to develop recommended program changes that would increase implementation and success. As a result, several changes were made: 1) tickets used for reinforcement were simplified for teachers to be able to issue more of them; 2) within-year professional development was offered to serve as a "refresher" for the program; 3) the reinforcement schedule was completely overhauled to increase staff acceptance and, importantly, student acceptance of the reinforcement system; 4) reinforcements were changed from tangible goods and items to non-tangible benefits that had no monetary value.

Program Implementation History – Year 3

Year 3 consisted of a continued series of implementation practices. Reviews were conducted by program administrators. Consultation was again provided by a national expert.

Surveys were administered to determine staff and student perceptions of the effectiveness of the programming. School-based data was collected on academic achievement and behavioral incidents.

Upon completing the 3-year, grant funded program, 75% of the schools by and for which this program was developed and implemented elected to continue the positive behavior and character education systems without any future financial support.

PLANNING CONCEPTUAL FRAMEWORK – THE EFFECTIVE CHANGE ZONE

Effective educational leaders engage and support others in the change process by using both their unique leadership artistry and their knowledge about management science (Von Bertalanffy, 1950; Senge, 1990; Norton, 2005). Leaders who implement innovations, such as those involved in this case study, use key organizational planning concepts and focus on the professional and personal needs of change participants. They manage in the "effective change zone" (Polka, 2010).

The "effective change zone" is similar to the "zone of proximal development" for individuals. This is the zone where learning and behavioral change is optimum, "…the point of readiness for a given concept" (Slavin, 2003. p.44). It occurs where "high-touch" interpersonal management practices, based on meeting personal and professional needs, intersect or commingle with the application of appropriate organizational planning concepts (Polka, 2007). Figure 1 illustrates this concept.

Figure 1. The Effective Change Zone (Polka, 2007).

Change planners possessing dispositions congruent with transformational leaders are most efficacious in managing in the "effective change zone" (Polka, 2007). They are proactive, raise the awareness levels of followers about inspirational collective interests, and help followers achieve unusually high performance outcomes (Hoy & Miskel, 2005). They manage the issues in a systematic manner scaffolding complex changes using simple, but sound, planning principles that can be appreciated, articulated and internalized by all involved (Hall & Hord, 2006).

The six professional needs or expectations and the five personal needs or dispositions as well as the four key concepts of sound organizational planning or organizational needs have been identified as significant micro-contextual components for individual satisfaction and organizational productivity in diverse research studies and serve as major "high-touch" references for the effective planning, implementation and sustainment of educational changes (Polka, 2010). This perspective is consistent with the "real change" research of Kotter and Cohen (2002) who stated, "Both thinking and feeling are essential, and both are found in successful organizations, but the heart of change is in the emotions. The flow of see-feel-change is more powerful than that of the analysis-think-change" (p. 2).

The significance of this "high-touch" micro-contextual focus as well as the imperativeness to scaffold in the "effective change zone" are further emphasized in other management of change research,

> Everyone must take responsibility for understanding the concerns that they and other people have about change, and they must also be willing to ask for what they need and be there for others in their time of need … Effective change is not something you do to people. It is something you do with them. (Blanchard & Waghorn, 1997, p. 200-201).

Fullan further corroborates the importance of this perception by insisting that sustainable changes in education are promoted by leaders who help people find meaningful connections to each other in their respective school contexts, "… they find well-being by making progress on problems important to their peers and of benefit beyond themselves" (Fullan, 205, p.104). Change agents and their colleagues learn from each other in the finest Vygotsky tradition, by scaffolding each other in the "effective change zone", using both personal artistry and sound management science principles (Slavin, 2003).

The foregoing concepts related to the significance of attending to the organizational, personal, and professional, and needs of individuals were corroborated by a study of more than twelve hundred (1200) K-12 teachers who identified the importance of interpersonal relationships exhibited by educational leaders who facilitated effective school reforms (Blasé & Kirby, 2000).

CASE STUDY OF EFFECTIVE CHANGE ZONE PLANNING AND IMPLEMENTING

When developing the Positive Behavior Interventions and Supports (PBIS Model) initiative the participant school district administration and faculty, either purposefully or serendipitously, focused on the three primary areas of the effective change zone model as

described in the next three matrices: Table 1. Organizational Needs; Table 2. Professional Needs; and, Table 3 Personal Needs.

Organizational Needs

Educational planning as a strategic process for the improvement of schooling appeared in the educational literature of the early Twentieth Century (Ornstein & Hunkins, 1988). For the past 100 years, educational leaders have employed various planning processes to improve teaching and learning in light of changing societal factors (Brandt, 2000; Brooks & Brooks, 1993; Cook, 1995; Darling-Hammond, 1997; Dewey, 1938; Doll, 1972; Eisner & Vallance, 1974; Fullan, 1999; Freire, 1970; Hyman, 1973; Kauffman, Herman & Waters, 2002; Lieberman, 1986; Norton, 2005). Many of these planning concepts have been correlated into useful paradigms for change in education. Most are based on the premise that sound planning activities for improvement incorporate four key organizational change needs first enumerated by Krug in 1957 consisting of the four Cs: cooperative, comprehensive, continuous, and concreteness. Examples of how the change leaders in this case study school district addressed those organizational needs of the innovation implementers are articulated in Table 1.

Professional Needs

The six professional "high-touch" needs or expectations have been comprehensively articulated in educational research and literature as keys to facilitating changes in professional settings: communication, empowerment, assistance in decision-making, leadership, opportunity for personal growth and time (Harnack, 1968). The significance of these six professional needs as related to effective educational planning activities was reconfirmed by subsequent research studies (Miller, 1981, Polka, 1977, Yuhasz, 1974) and are integral components of contemporary research related to the professional needs of most significance for coping with change (Beane, Toepfer & Alessi, 1986; Brandt, 2000; Hall & Hord, 2006). These six professional needs have also been identified as critical to the successful short-term implementation of innovations and to the long-term sustainability of organizational changes (Fullan, 2005; Kotter & Cohen, 2002; Hall & Hord, 2006). Examples of how the change leaders in this case study school district addressed the professional needs of innovation implementers are articulated in Table 2.

Personal Needs

The six "high-touch" professional needs or expectations as well as the five personal needs (see Table 3) or dispositions of people involved with changes have also been identified as critical to the successful short-term implementation of innovations and significant to the long-term sustainability of the changes (Fullan, 2005; Kotter & Cohen, 2002; Hall & Hord, 2006).

Table 1. Organizational Needs Matrix

Organizational Needs Component	Description of Need	Case Study Application
Cooperative	*Experiencing large groups of diverse stakeholders working in collegial setting to plan for the change.*	Each instance where development of the PBIS model took place was in a structured setting of educational colleagues. Each session was comprised of no less than 6 individuals (inclusive of 1 administrator) from each participating school building plus district administrative representation and other staff, including a school counselor and school psychologist. These sessions included approximately 40 people representing 5 schools, and covering grades pre-K through 8.
Comprehensive	*Considering the vast array of real and potential intervening variables (people, things, and ideas) that impact this change implementation.*	Each recruitment session or planning session allowed for the open and honest sharing of teacher opinion regarding the potential success of the model. These experiences allowed for the PBIS Model to develop in a way that would foster acceptance and reduce opposition to implementation. For example, numerous teachers were concerned with the perception that this model would be in addition to their typical teaching responsibilities. Because of this honest perception, care was taken to more effectively show how the program integrated into the current daily structure and was not in excess of current time spent on instruction.
Continuous	*Monitoring and adjusting of the innovation as the context changes; there are no pre-fixed immutable specific "end date" for the successful implementation of the change.*	At initial conception, development of the PBIS Model was never to be a single instance. Separate from the 12 months of evolved planning, the model was designed to allow for periods of "recalibration" within years two and three. For example, after Year 2, i.e. the first year of implementation, extensive work was done over the summer to revamp the reinforcement structure from lottery-style to menu-style. This was found to be palatable to staff and students alike. Smaller changes made to the behavior matrices and actual items for behavioral reinforcement were also made based on staff input.
Concreteness	*Producing specific artifacts or events related to the innovation in order for participants in the process to have "concrete" evidence that they can identify and celebrate as the outcomes of their collective efforts.*	Three sets of permanent products, dubbed "Behavior Matrices", were developed as concrete artifacts of program development. Each behavior matrix was geared towards a different area of the school building (e.g. classroom, hallway, cafeteria, bathroom, etc.) and operationally defined appropriate behavior in that area. These matrices were also designed in a developmentally appropriate way, where development focused on appropriate behavior and language for pre-K through grade 2, grades 3-6, and grades 7-8.

Table 2. Professional Needs Matrix

Professional Needs	Description of Need	Case Study Application
Communication	*Comprehensively and personally interacting with others about the diverse thoughts and feelings related to the change.*	Educators from all levels of instruction K-8 and from a diverse set of school buildings were selected to participate in program development. This allowed for diverse perspectives to be shared and incorporated into planning sessions. Also, district leadership was sure to express development of this PBIS Model as a district priority with effective supervision and specific collaboration with administrators at all stages of planning.
Empowerment	*Having input to the applications of the changes in work settings.*	Development of this PBIS Model, rather than some other related initiative, was purposeful in that it allowed teachers and education professionals to have significant input relating to application of the changes they wanted to see in their work environment.
Assistance	*Having resource personnel readily available to help scaffold the changes.*	During the initial planning stages and development of this model framework numerous resource personnel were available to help scaffold. Administrators of various levels of education were omnipresent as well as university resources and non-classroom personnel (e.g. school psychologist) to provide for proper assistance in idea development and program decision-making.
Leadership	*Being aware that supervisors are sincerely committed to the change.*	Administrative presence at all planning sessions and continuous direct communication from district and school-building level administration illustrated the administration's support of the PBIS Model.
Opportunity	*Comprehending the personal and professional benefits associated with the change.*	Helping participant teachers develop a functional understanding of the benefits to the proposed model took several forms. First, school administrators were presented the case for the necessity of a character education/PBIS model to be developed. They were then asked to relay this information to school staff. Second, a local expert in PBIS was asked to independently travel to each school and present to faculty about the history of such programs and expected plans. Third, a school district employee then followed up with interested volunteer teachers from each school to answer any questions.
Time	*Experiencing diverse opportunities to reflect about the changes and applying the changes in daily operations.*	One entire calendar year was spent educating staff as to this program, seeking volunteer participation, professional development on character education and PBIS, and program planning and development. Over the two-year span of actual program implementation, continued planning time was permitted in each school to allow guided processing of perceived and actual program effectiveness. Also, time was permitted for staff top make recommendations for programmatic change that would enhance adoption of the Character Education/PBIS model.

Table 3. Personal Needs Matrix

Personal Needs Component	Description of Need	Case Study Application
Challenge	*Visualizing the change as an opportunity for personal and professional growth as opposed to a crisis.*	Addressed during this planning phase of program development as this was the first instance where the participant district was developing a systemic program to develop character education programs and a PBIS model of delivery. This challenge required staff to consider fundamental shifts in disciplinary practices, instructional practices, and overall school-level perspective on the role of the teacher to purposefully instruct and develop behaviors indicative of strong character and positive behavior.
Commitment	*Observing supervisors and other district leaders demonstrating and modeling support for the innovation.*	It could be offered that all of the above referenced "high-touch" concepts within the Personal Needs area of effective change displayed the commitment that is necessary for educators to be able to effectively respond to necessary change. Briefly, commitment was addressed through development of an effective and appropriate number of professional development times to create this model, through provision of substitutes for school-hour development, and through appropriate compensation during non-instructional school hours.
Control	*Believing and acting as if you can influence the course of the change.*	Initially, control was the focus of administration when developing the initial PBIS model. This was evident through the use of approximately 100 person-hours of planning time in developing the model. Volunteer teachers were provided support to work together at numerous meetings over a period of several months to plan the implementation.
Creativity	*Envisioning optimal experiences and new approaches to implement the change.*	Creativity was addressed through this lengthy time of development as creativity was viewed as a supportive process where one can not be expected to 'force' creativity in short periods of time over short pockets of program development.
Caring	*Experiencing a nurturing family attitude at work.*	The lengthy period of planning, where staff were allowed to leave their classrooms and work in small and large groups also supported the concepts of caring as it showed the district's commitment to the teachers' perspectives about the change and the value of their contributions.

Research conducted in 1992, with a sample of two hundred and seventy-nine (279) New York educators, enabled researchers to identify the significance of the above organizational, professional, and personal needs for the implementation of technological changes in education (Polka, 1994). Additional studies replicated that research. Three hundred and twelve (312) educators from two different samples at the end of the 20th century reconfirmed the significance of these "high-touch" micro-contextual needs as key factors to be addressed when dealing with educational changes (Polka, Mattai & Perry, 2000). In addition, two hundred and twenty-nine (229) educators involved in implementing the Georgia Performance Standards verified the significance of these organizational, professional, and personal needs in relation to making major wide-scale state curriculum changes (Polka, 2009). Researchers further analyzing the results of these various studies concluded

that educational leaders must not only be cognizant of these "high-touch" needs but must directly provide for them in a customized manner to promote meaningful and sustainable educational changes (Polka, 2010).

CASE STUDY RESULTS OF MANAGING IN THE EFFECTIVE CHANGE ZONE

As a result of managing in the effective change zone and planning, implementing, monitoring, and adjusting the Positive Behavior Interventions and Supports (PBIS) Model accordingly in this urban school district the following outcomes have been identified:

Superintendent Suspensions

Treatment schools achieved a 38% reduction in the number of Superintendent Suspensions, and a greater reduction in Superintendent Suspensions than the comparison group as identified in Table 4.

Table 4
Treatment and Comparison: Baseline, Target, and Actual Numbers of Superintendent Suspensions

Group	Baseline 2007-2008	Target 2008-2009	Actual 2008-2009	% Change 2007-2008 and 2008-2009
Treatment	32	29	20	38%
Comparison	53	48	41	23%

VADIR reported incidents

Treatment schools achieved a 48% reduction in the number of Violent and Disruptive Incident Reporting (VADIR) reported incidents, and a greater reduction in reported incidents than the comparison group as shown in Table 5.

Table 5
Treatment and Comparison: Baseline, Target, and Actual Numbers of VADIR Report Incidents

Group	Baseline 2007-2008	Target 2008-2009	Actual 2008-2009	% Change 2007-2008 and 2008-2009
Treatment	204	184	95	53%
Comparison	338	304	240	29%

Disciplinary referrals

Treatment schools, as displayed in Table 6, achieved a 70% reduction overall in the number of disciplinary referrals and a greater reduction in disciplinary referrals than the comparison group.

Table 6
Treatment and Comparison: Baseline, Target, and Actual Numbers of Disciplinary Referrals

Group	Baseline 2007-2008	Target 2008-2009	Actual 2008-2009	% Change 2007-2008 and 2008-2009
Treatment	1,929	1,447	588	70%
Comparison	1,025	769	614	40%

Gates-MacGinitie 6th Grade Academic Achievement Assessment

Table 7 indicates that on the Gates-MacGinitie 6th Grade assessment of reading skills, the treatment schools achieved a 10% increase in the percentage of students at or above District standards on the Gates-MacGinitie English Language Arts Assessment for 6th grade, and demonstrated greater improvement than the comparison schools.

Table 7

Treatment and Comparison: Gates-MacGinitie: 6th Grade Only: Percent of Students at or Above District Standard: Baseline, Target, and Actual Percentage

Group	Baseline 2007-2008	Target 2008-2009	Actual 2008-2009	% Change 2007-2008 and 2008-2009
Treatment	78%	82%	86%	10%
Comparison	56%	59%	59%	5%

Gates-MacGinitie 7th and 8th Grade Academic Achievement Assessment

According to assessed results, Table 8 indicates that the **t**reatment schools achieved a 4% increase in the percentage of students who are considered at or above District standards on the Gates-MacGinitie English Language Arts Assessment for 7th and 8th grades, and demonstrated greater improvement than the comparison schools.

Table 8

Treatment and Comparison: Gates-MacGinitie: 7th and 8th Grade Only: Percent of Students at or Above District Standard: Baseline, Target, and Actual Percentage

Group	Baseline 2007-2008	Target 2008-2009	Actual 2008-2009	% Change 2007-2008 and 2008-2009
Treatment	68%	71%	71%	4%
Comparison	75%	79%	77%	3%

School as a Caring Community Profile-II (SCCP-II)- Faculty & Staff

The faculty and staff at the participating schools completed the School as a Caring Community Profile-II (SCCP-II). The treatment group had a higher percentage at the end of the project, than the comparison group, in terms of faculty and staff perceptions about their school being a safe, nurturing, and ethical community as illustrated in Table 9.

Table 9
Treatment and Comparison: Percentage of Staff Perceiving that they work within a Safe, Nurturing, and Ethical Environment

	Pre: September 2007	Post: June 2009	Percent Change
(Ethical)			
Treatment	60%	65%	8%
Comparison	58%	57%	- 2%
(Nurturing)			
Treatment	59%	63%	7%
Comparison	55%	53%	-4%
(Safe)			
Treatment	51%	59%	16%
Comparison	44%	42%	-5%

School as a Caring Community Profile-II (SCCP-II) - Students

Students at the participating schools completed the School as a Caring Community Profile-II (SCCP-II). While, overall, all students perceptions decreased, the treatment group had a higher percentage at the end of the project, than the comparison group, in terms of students perceiving their school to be a safe, nurturing, and ethical community as illustrated in Table 10.

Table 10
Treatment and Comparison: Percentage of Students Perceiving an Ethical Environment

	Pre: September 2007	Post: June 2009	Percent Change
(Ethical)			
Treatment	34%	33%	-3%
Comparison	44%	29%	-34%
(Nurturing)			
Treatment	40%	37%	-8%
Comparison	44%	36%	-18%
(Safe)			
Treatment	44%	28%	-36%
Comparison	52%	27%	-48%

Professional Development

Staff and faculty feedback forms were administered following professional development activities in all three years of the PBIS Project. The feedback from the first year indicated that 100% of professional development participants would implement what they learned and share with other individuals within their buildings. Feedback from the second project year indicated that 58% of professional development participants do include PBIS as a part of the academic curriculum. Feedback from the third project year indicated that 100% of professional development participants indicate that positive behaviors and character education are included as part of the academic curriculum.

End-of-the year focus group

End-of-the year focus group: End-of-the year focus groups were held with representative samples of staff members in both treatment and comparison schools for the last two project years. Focus groups centered on teacher practices related to character education including overall promotion of positive behaviors and the integration of these into the academic curriculum, overall school climate, and school wide support for promoting practices. The correlations between the teacher practices conducive to positive behaviors among students that in turn promote an overall positive school climate were emphasized. Results of the focus group indicate that there is no standardized implementation of positive behavior traits at the building level in the comparison groups like there is with the treatment group. Unlike the treatment group, results of the comparison school focus groups indicate that there is a lack of consistency in how pro-social behaviors are promoted and modeled at the school building level and classroom level.

CONCLUSIONS AND RECOMMENDATIONS

As a result of this retrospective analysis of the focused planning, implementing, monitoring, and adjusting of the Positive Behavior Interventions and Supports (PBIS) Model used in this urban school system case study, it is concluded that any systemic change, or systemic application of a program model, will be accomplished successfully if educational leaders manage in the effective change zone addressing those key organizational, professional, and personal needs of those implementing the change. The PBIS Model has made a significant change in student behavior, academic achievement, and faculty focus on character education in this urban school district. The above identified outcomes illustrate the impact of this program. However, the researchers contend that it was not only the PBIS Model that made the difference but also the way it was planned, implemented, monitored, and adjusted via effective change zone planning addressing the “high-touch” needs of those stakeholders. It was both the content of the change (PBIS Model) and the change process (Effective Change Zone) that both contributed to the success of the change as documented in this case study.

SUMMARY

Contemporary educational leaders or those aspiring to become one, need to focus on attending to those organizational, professional, and personal factors to effectively manage the ever-changing educational landscape of the twenty-first century. They must continuously hone their “high-touch” orientations and interpersonal skills and utilize both their personal change artistry and their management science skills to help their respective employees and organizations adapt to their future. According to Fullan, the sustainability of

school efforts is related to "…continuous improvement, adaptation, and collective problem solving in the face of complex challenges that keep rising" (Fullan, 2005, p.22).

However, it needs to be reinforced that each context is different and the needs of the individuals implementing innovations vary, but planning for change with this effective change zone orientation is a valuable paradigm for educational leaders so that this "high-touch" process for change is given the appropriate priority it deserves. It is predicated on focusing as much, if not more, on the human side of change as it is on the specific programs to be implemented. People make changes happen and leaders who address the needs of the people making the changes are on the path to making those changes successful and sustaining them.

But, as the real world contexts of schools including the people, especially the various stakeholders, continually change; it is important to recognize that the needs of the people implementing and sustaining will change accordingly. The savvy leader recognizes the ever-changing complexities of their respective contexts and plans for change by considering their contemporary human capital factors at each specific time period. The imperativeness of using this "high-touch" needs-based approach to make changes in real world school contexts is consistent with the comprehensiveness advocated by strategic planners,

> "If we are not to dehumanize, oversimplify and artificially make our educational world linear and restricted, it is imperative that we develop strategic plans based upon the actual realities of our organization and society, which are complex" (Kaufman, Herman & Watters, p.109).

Thus, educational leaders who function in the "effective change zone" will be those most likely to plan, implement, and sustain the institutional changes necessary to adapt to current and future educational needs.

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