Abstract
This paper examines the rationale behind P-16 educational initiatives and challenges to their successful implementation. Through two short case studies, it also demonstrates the effectiveness that P-16 alignment brings to bear on student success and regional economic development. Using Walsh’s (2009) framework of six thematic areas for improvement in P-16 Education, the authors specifically identify P-16 governance as a primary area of interest. Examining the need for Innovator/Bellwether Awards that go beyond Instructional Programs and Services, the two community college P-16 programs identified reflect P-16 education progressive success in Planning, Governance, and Finance (PGF) and also the category of Workforce Development (WD). We examine issues such as the lack of alignment between P-12 and higher education, the need for including a variety of stakeholders in the process, and, of course, the gains that can be made through successful initiatives. Our basic methodology involved examining outcomes of students in the featured programs in relation to national outcomes information for student populations in general. The literature describes several approaches being used to meet the challenges of college readiness and preconceptions about technical education programs. Our research revealed that data collection on P-16 initiatives varies widely in terms of types of information collected and its ultimate use in program accountability and deployment. Finally, we note that students, regional stakeholders, and states have much to gain from intensifying their focus on alignment efforts such as P-16 education as early outcome data have shown positive potential.
Our nation’s workforce is in jeopardy. Too many Americans have a constricted view of what it means to be successful in school, in careers, and in adult life. Educators, policymakers, and the public are too willing to define “success” as a four-year college degree and tend to concentrate most of our economic and social resources on that single goal. (Bottoms & Young, 2008, p. 2).

The idea of community colleges playing a role between secondary education and university education is not a new phenomenon. In discussing the significance of the “junior college” movement, George F. Zook proposed in 1926 to the Ohio College Association and Allied Societies that:

The college... is compelled to complete in the freshman and sophomore years the general secondary education of their students before they call begin their real function of higher education (p. 5).

Zook continued to discuss that, to remain competitive with other countries, we need to extend secondary education to better prepare students for the university. He believed that, based upon the unique structure of the then American junior college system, that the secondary and junior college systems needed better orchestrated curriculum efforts to best prepare our students.

In their 2008 article, “Righting a Troublesome Disjuncture,” Callan and Krist discuss how throughout the last century, the K-12 sector and higher education sector have drifted apart from one another. The authors point out that the major reason this occurred was due to the massive expansion of both entities. High schools became the minimal standard for education across the country at the same time numerous higher education institutions were being created. The authors point out that in the 1900s the subject matter being taught at colleges was limited and served only a small number of students. Colleges influenced high schools much more closely during this time by setting admissions standards that were communicated to prospective college students.

Callan and Krist (2008) point to the fact that the University of California began to accredit high schools as an example of how K-12 and higher education were more closely aligned in the past. Following the passage of the GI Bill, there was a need for further expansion of higher education. This resulted in the growth of less selective institutions such as state universities and community colleges. During this time the measure of quality for higher education was directly related to how much they could distinguish themselves from high schools. This caused the relationship between higher education and high schools to become disjointed. Callan and Krist (2008) note that community colleges are an example of this. They state that many community colleges were created as a product of school districts. As they expanded, they separated and became a separate entity.

Generations later, Zook’s concept has taken on new names: K-16 Education (Krist & Venezia, 2001) and, most recently, P-16 Education (Walsh, 2009). This paper reviews the twenty-first century’s literature on P-16 Education and examines two case studies of community colleges that are considered progressive in their implementation of P-16 Education.
Literature Review

Education reform has been a common topic in media, government, and academia. Changing college admission policies, K-12 standardized assessment of students, teachers, and schools, and accountability measures are just a few of the main areas of concern within education reform. Interestingly, it has been noted that little has been done to systematically coordinate efforts across the education systems of secondary, community college, and university education (Krist & Venezia, 2001).

Why is it important to coordinate efforts between these education systems? Zook (1926) charged that we need to remain competitive with other counties. Although the argument has become more sophisticated, the essence of Zook’s rationale remains the same. Callan and Finney (2005) suggest that our policies are only working to ensure high school graduation, which is no longer an adequate education to remain competitive in a global economy. They note that, in 2000, 47 percent of the 34.6 million of young adults ages 16 to 24 were neither attending high school or college (p. 3), clearly representing an empty reservoir of workforce knowledge and skills.

Presently, the traditional infrastructure that crosses the line between these systems involves remedial courses at the community college and advance placement courses for high school students. However, the present infrastructure is not adequate to support student success. Callan and Krist (2008) point out that there is little to no cooperation between K-12 and higher education faculty even when they teach the same subject matter. This has resulted in different standards and expectations which have led to less prepared students. They discuss the fact that almost one half of all college students are underprepared for upper level coursework and must take remedial coursework. They also point out that baby-boomers are going to begin retiring in droves which will cause a shortage of college-educated individuals in the workplace if more young adults do not obtain college degrees.

Walsh (2009) identifies two symptoms of a lack of alignment between secondary and post-secondary education systems. First, she cites low college graduation rates demonstrating that only 69 percent of high school freshman graduate, only 28 percent of students seeking an associate’s degree achieve it in three years, and only 56 percent of students seeking a bachelor’s degree achieve it within six years (Walsh, 2009). Second, Walsh points to a significant demand for remedial courses: 61 percent of two-year college students and 25 percent of four-year college students complete at least one remedial course (Walsh, 2009). These symptoms indicate a need for a more collaborative system between secondary and post-secondary education.

Krist and Venezia (2001) identify the massive dependence on remedial courses as one manifested failure from the disconnected secondary and post-secondary education systems. They also identified five additional areas of concern:

1) An inequitable distribution of academic opportunities to pursue advance placement and college preparatory courses in high schools.
2) Grade inflation and a reliance on grades as predictors for college admission and student success.

3) Different conceptions of student assessments used at the K-12 level and college entrance level ultimately lead to “variances in expectations regarding what students need to know and be able to do to graduate from high school and enter college” (p. 95).

4) A lack of high quality and early college counseling for many students.

5) Structural problems endemic to the senior year of high school (i.e., colleges typically ignore senior year grades while most students take their most challenging year of math senior year).

In 2003, Krist, Venezia, and Antonio identified further misalignment concerns of the secondary and higher education systems related to state policy issues. They involved state funding, consistent measurement standards, and lack of public policy to support student success in transitioning from high school to college. Expanding their call for public policy adjustments, Callan and Finney (2005) expanded upon the concept of reorienting public policy while calling for greater efficacy from schools and education systems to align and implement their missions.

Walsh (2009) coherently ties the P-16 research together in a fifty state analysis of the P-16 systems. With the State Higher Education Executive Officers, she categorizes the areas of needed improvement from prior research into six themes: Data Systems, Alignment of Coursework & Assessments, Finance, Accountability, Public Relations, and P-16 Governance. As we entered this research project from the standpoint of understanding P-16 from a Planning, Governance, and Finance (PGF) perspective (specifically a Governance perspective), we focus on the P-16 Governance literature.

**P-16 Governance**

The concept of P-16 Education centers on the idea that the US education system needs to better align its curriculum starting with pre-school and continuing through postsecondary education and into the workforce. As one can imagine, this is a large undertaking requiring many different interest groups to become involved. Making sense of the challenges and bringing the necessary constituents to a point of agreement while providing evidence of progress is not an easy task. The creation and membership of P-16 councils vary from state to state and so does their success.

In their 2008 article, “P-16 Education: Where Are We Going? Where Have We Been?” Chamberlin and Plucker seek to make sense of P-16 initiatives and provide examples of states that have had varying degrees of success with their initiatives. They identify initiation and membership as an area of variation between P-16 councils in different states. Councils that are created by legislators have clear guidelines written into the law regarding the council’s membership. The governor appoints members of the council in states where they are created by
an executive order. P-16 councils created by education agencies are overseen by various state education administrators. Regardless of how they are created, the most common members of P-16 councils include educators from early childhood education through higher education as well as representatives from the executive and legislative branches of the state government.

In Dounay’s 2008 article, “The Three A’s’ of Successful P-16 Reform: Design Elements That Help Maintain Momentum,” she identified a number of groups (besides the K-12 and higher education) who must be represented in order for the council to be successful. These include early learning educators and researchers, the business community, and legislators. Dounay (2008) argues that educators focused on the birth -5 years time period must be explicitly represented rather than grouping their interests in with the K-12 interests. She also argues that members of the business community such as CEOs should be included so that a possible means of support from the private sector can be established.

Finally, Dounay (2008) cites lawmakers as key members of the council. She acknowledges that many states are reluctant to include lawmakers out of concern that the process could become overly politicized if they are included which would cause their efforts to stall. She suggests that these concerns are valid, but without a buy-in from the state government, implementing P-16 council recommendations could prove limited at best. She gives a number of suggestions for keeping government representation bipartisan in hopes of avoiding delays based on politics.

These suggestions and ideas about inclusion still do not answer the question; can council members with such varying interests actually accomplish P-16 alignment? Furthermore, what does this goal look like? Chamberlin and Plucker (2008) identify reducing achievement gaps, creating data systems to track student success, and the alignment of curriculum from preschool through post-college as measures of success. However, they acknowledge that the major hurdle P-16 systems face deals with a lack of accomplishment.

Chamberlin and Plucker (2008) point out that many states have P-16 councils that have been in existence for years and have shown little progress. They point out that most P-16 councils have overlooked the importance of evaluation to prove success. They argue that the councils must look beyond merely increasing test scores and decreasing the achievement gap. Instead, they should seek out measures that examine the preparedness of a state’s workforce. Also, the concept of an effective P-16 initiative must better be defined. This definition must be broad enough to include students who enter the workforce after high school.

**Methodology**

Krist, Venezia and Antonio (2003) believe that, even before we start tackling specific areas of improvement, a paradigm shift is needed from access to college to “access to success in college” (p. 39). We have used the paradigm of student success combined with Walsh’s six themes for P-16 education as our framework for identifying and evaluating community colleges who are successfully tackling one or more of these themes.
In examining previous Bellwether and Innovation Awards from the League of Innovation for Community Colleges, we were surprised to see that no schools received an award in 2010 for P-16 projects related to PGF or Workforce Development (WD). Awards are distributed to schools for “innovation types” mostly related to Instructional Programs & Services (IPS). For example, Kirkwood Community College received a 2010 Innovation Award for bringing community college technical courses to rural high schools (League Competition, 2010). This was recognized under the category of “Teaching and Learning.” Sinclair Community College also received an award under the category of “Basic and Developmental Education” that identifies and tracks incoming cohorts of high school students to an effective advising system for remedial education needs (League Competition, 2010). We group both of these as IPS-related awards, which were the only two community colleges among dozens of 2010 Innovator Award recipients that loosely related their efforts to P-16 education (loosely in the sense that they are community colleges who involve high school students in a project and do not articulate P-16 in their project summary).

Are there schools tackling P-16 from more than an IPS perspective?

With this question in mind, we set out to find community colleges who were finding innovative solutions to improve P-16 education that address one or more of the IPS, WD, and/or PGF areas. We identified Stark State Community College (Stark Education Partnership) in North Canton, Ohio and Northeast State Community College in Blountville, Tennessee as two examples of initiatives that demonstrate the strength and promise of P-16 alignment efforts. As we identified a collective personal interest in P-16 Governance, one of our case studies, Stark State, reflects progress in this area. Our examination of the two programs is described in the next two sections.

Case Study One: Stark Education Partnership (Stark State College)

The Stark Education Partnership in Stark County Ohio has served as an exemplary example of a successful P-16 initiative that has made significant progress towards improving the educational conditions for residents of Stark County as well as providing an educated workforce to local industries. The official P-16 Compact was formed and implemented in 2002 (Stark Education Partnership, 2010). Their specific partnership works with educators in the region representative of high schools and higher education to align educational standards with the workforce needs of the Stark Education Partnership. Community leaders and business members are included in the partnership to foster economic growth and development for the region based on the educational needs of local industries (Stark Education Partnership, 2010). Stark County’s Education Partnership addresses current challenges to successful P-16 implementation by providing resources to other community or regional coalitions; additionally, Stark County has seen impressive growth with respect to graduation rates, remedial course placements, and economic development (Stark Education Partnership, 2010).

Within the high schools, improvements have been made to assist with increasing the graduation rates and college preparation of Stark County students so they are better prepared for workforce deployment. The central philosophy of Stark’s Partnership has been to ensure quality education and opportunities for residents from birth to employment (Stark Education Partnership, 2010). This guiding philosophy has had a number of different programs and policies that have assisted
with implementation. Graduation rates in the Stark County educational system have reached or exceeded 95 percent; in urban environments, schools have had increases in graduation rates as well, with Canton city schools experiencing an increase from 54 percent to 73 percent, McKinley High School having an increase from 73 percent to 82 percent, and Timken High School having an increase from 60 percent to 77 percent (Stark Education Partnership, 2010).

These increases in graduation rates are reflective of the initiatives that have been successfully implemented by the Stark County Education Partnership to address college preparation and readiness in students graduating from the Stark County school districts. Initiatives have been focused around offering Stark County school districts opportunities to benefit from local institutions of higher education through sharing resources and forming partnerships (Stark Education Partnership, 2010). The compact that Stark County Education Partnership authored outlines the philosophy of how alignment between school districts, institutions of higher education, local communities, and businesses can benefit everyone (Stark Education Partnership, 2010).

Another approach to better preparing Stark County students for college and university is the variety of offerings for college opportunity credits to high school students. There are a variety of approaches that have been implemented ranging from post-secondary enrollment options to summer-based programs of study, and programs geared specifically to offering college credit courses to student during their senior year of high school (Stark Education Partnership, 2010). Advanced placement testing is another avenue explored by the Stark Education Partnership to allow their students to earn college credit for taking college-level courses in high school and passing Advanced Placement tests in certain subjects (Stark Education Partnership, 2010).

The summer scholars program is a dual credit option that is geared toward low-income first generation students. 62 of 63 students participating in the pilot offering of the program earned six credits from Stark State College (Stark Education Partnership, 2010). Technical preparation has been another technique used to increase college attendance in the high schools of Stark County. The Stark County Tech Prep Consortium markets technical education to students enrolled in high school as a career option that will require education but yield a good job (Stark Education Partnership, 2010). The technical preparation programs in Stark County illustrate the value of encouraging students to pursue a technical education that will require advanced technical training (Stark Education Partnership, 2010).

Remediation is another issue that has been addressed by the Stark Education Partnership because many students upon entering college find that they must take remedial courses to bring them up to the educational standard expected at college. One aspiration of the partnership is to eliminate the need to remediate students who have graduated from Stark County’s school districts (Stark Education Partnership, 2010). 14 Stark County school districts have partnered with Kent State Stark and Stark State College to align the skills and competencies needed for success in college and high school, with special attention paid to student success and support (Stark Education Partnership, 2010). Quarterly the program will be assessed to determine what aspects require modification to improve outcomes, which will help the program to properly align the high school
The Stark Education Partnership has identified the link between educational attainment and economic development within a region; in response to that link, they have fostered an increase in the internships, co-operative educational experiences, and scholarships that are available to the students of Stark County school districts (Stark Education Partnership, 2010). By providing experiential learning opportunities for the students of Stark County, the Stark Education Partnership hopes to foster an environment where the local communities, businesses, school districts, and institutions of higher education support learning. Through encouraging businesses to invest in students and offer learning experiences and support services, the Stark Education Partnership also hopes to encourage students to consider working for a local business and applying their education back into the workforce of Stark County. The Stark Education Partnership hopes to reduce offerings for courses that will train students for decreasing job markets and increase the numbers of students entering programs of study that are related to growing industry.

A removal of non-academic barriers to education and assisting students to get a head start on college has also been identified as ways to assist Ohio’s students (Stark Education Partnership, & Stark County Education Service Center, 2008). Improving and assuring there is a connection with services delivery to students, promoting innovation among program design, and increased collaboration efforts are also things that can be modified to assist students succeed (Stark Education Partnership, & Stark County Education Service Center, 2008).

Our group feels that the Stark Education Partnership is worthy of a Bellwether award for innovative community college service and design for their contributions towards developing instructional programs and services as well as workforce development. Through the integration of an aligned curriculum from Stark County school districts to local higher education in an effort to produce more qualified and skilled local workers, the Stark Education Partnership, in conjunction with its community college partners, has devised a plan of education that is innovative and designed to enhance the educational experience of students and the workforce development available to residents of Stark County.

Case Study Two: Northeast State Community College

Northeast State Community College, a comprehensive community college located in Blountville, Tennessee, was established as Tri-Cities State Area Vocational-Technical School in 1966. The college serves a five-county service area and had a July 2009 enrollment of 6,270 students. Northeast is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree (Northeast State website, 2010).

Northeast State Community College’s participation in the P-16 movement began in 2006 with the introduction of a program called Career Fast Track. According to Gary Lee, Career
Fast Track program director, the program offers qualified area high school students career-technical credit courses on the college campus as well as the potential for a paid cooperative education program (G. Lee, personal communication, June 3, 2010). Career Fast Track, a nexus between higher education and economic development, grew out of an earlier program called Educate and Grow that provided two years of tuition assistance to qualifying students within the immediate service area. The current program is a partnership among 16 area high schools, local industries, and Northeast State Community College. Motivated high school students have the opportunity to pursue a more challenging academic program in high school by completing seven to nine hours of college-level credit in industrial technology or health-related professions. Students enroll in courses at Northeast State during the second semester of their senior year and receive college-level credit as well as credit toward a high school diploma. Students who complete four designated courses may be eligible to enroll in paid co-op programs with local industries while they matriculate at Northeast State.

Students who wish to participate in the program must meet certain entrance standards to qualify. Among the entrance standards is the need to have ACT sub-scores of 19 in math, English, and reading, be recommended by high school technical education coordinator, and meet all regular Northeast State Community College admissions requirements. The students must have an expressed interest in pursuing a career in either industrial technology or a health-related profession with the goal of attaining an associate degree or technical certificate (Northeast State website, 2010).

Bottoms and Young (2008) tell us that, “Many students will be more motivated to complete a rigorous academic core if they can couple it with apprenticeships and in-depth study in a high-quality career/technical program during high school” (p. 4). The opposite of this is a group they describe as the neglected group. Students do not comprehend the level of preparation and commitment that is required to be successful at the post-secondary level. This is perpetuated by schools focusing most of their attention on those planning to attend a four-year college or university. Those planning on a community college or technical college education are often not given the sort of preparation needed to be successful at the college level (Bottoms & Young, 2008). What leads to this lopsided take on post-secondary preparation? Some of it gets lost in the overemphasis two-year colleges place on access, and the under-emphasis on college readiness. The end result is too often, an average two-year college completion rate that is far below that of most four-year counterparts. Data from NCHEMS (2005) note that in 2005, only 53 percent of first-time freshman attending two-year colleges returned for their sophomore year compared with 80 percent at four-year institutions.

A program such as Career Fast Track helps Northeast State and its P-16 partners bridge the gap that often exists for aspirants to community college technical programs. It sets the bar at reasonable entry rates for college-level performance while also meeting standards expected by industry partners. According to Lee, most students who fail to qualify are those who are not prepared for college-level academic work. He noted that the ACT is the single biggest barrier to program participation because of the academic qualification (G. Lee, personal communication,
June 3, 2010). This is echoed by Bottoms and Young (2008) who indicate that, “Many high school students, teachers, counselors, and principals do not invest enough in student preparation for community college because the common perception is that anyone can enroll in community college” (p. 15). Perspectives on testing also complicate the matter as Farrell and Seifert (2007) tell us that “One dilemma is that K-12 policy makers test for what they think students should have learned, and postsecondary educators test for what they think students need to know before attempting college-level courses” (p. 72).

Lee indicated that a major challenge in keeping Fast Track successful was promoting it to students and parents as a program of choice rather than a program of last resort (2010). The program is attractive to students because of the potential for high wage jobs in the local area upon graduation. This helps meet the goals of the P-16 initiative and the state of Tennessee by supplying local industry with a well-prepared workforce. Bottoms and Young (2008) tell us that states need to “pique students’ interest in high-demand, high-skill, high-wage occupations; and offer programs of study important to the local and state labor needs that are linked to postsecondary education” (p. 7). Lee noted that those completing the Associate of Applied Science in the health professions major enjoy a placement rate of 97 percent (G. Lee, personal communication, June 3, 2010).

In response to questions regarding outcomes of Northeast State’s Career Fast Track program, Lee indicated that the program regularly reports participation data to the Tennessee Labor and Workforce Board, the Tennessee Board of Regents, the regional P-16 council, and participating high schools (2010). Data regarding program retention and college-matriculation were less readily available as was performance of program participants versus non-participants. This is common among many of the dual-enrollment/P-16 models across the United States as Karp and Jeong (2008) note “The dearth of research occurs in large part, because appropriate data are not collected by programs, districts, or states” (p. 3). As programs such as Career Fast Track mature, the data generated will allow program administrators and policymakers to make informed decisions about the program’s long standing success and impact. It represents an innovative and effective means of meeting the regional employment and educational needs of the citizens of Northeastern Tennessee. In terms of meeting criteria for the Bellwether Award, Career Fast Track is an innovative program that has built a solid foundation for student and regional economic success and meets the critical issue of partnerships by serving the workforce development needs of Northeastern Tennessee through strong partnership, articulation, and targeted career pathways. The program demonstrates the best of what can be accomplished through deliberate alignment of available resources and pointing them in the same direction.

**Conclusion**

Based upon our review of the literature and communication with representatives from active P-16 initiatives, there is no doubt that the need for an orchestrated P-16 education exists. The present structure of advanced placement courses in high schools and remedial education in community colleges is costly and ineffective in preparing our youth for college or the workforce. A significant amount of literature has been produced in the past decade that has not only
identified a sometimes wide disconnect between secondary and higher education but has also assessed every state’s P-16 efforts and established a working framework of the six core areas that need improvement. We chose to focus on P-16 Governance, as a framework for viewing the need for strong policy review and formation to guide state and regional efforts in aligning their K-12 and postsecondary sectors in meaningful and effective ways. Additionally, greater and more effective use of P-16 councils by states that currently do not utilize them or underutilize them will allow employers and other regional stakeholders to sit at the same table and actively participate in the alignment process. The ultimate beneficiaries of these efforts is, of course, students who matriculate through programming that provides solid career opportunities, regional employers who benefit from a well-prepared and ready workforce, and states who remain competitive in their quest for greater economic development.

Established and innovative programs, such as those found at the Stark Education Partnership and Northeast State Community College serve as benchmarks for others to follow on a national level. They demonstrate the potential of meaningful partnerships and provide us with well-designed career pathways that hold promise for everyone involved in them. Initiatives such as these seem to truly represent those unique and innovative qualities which the Bellwether Award was meant to recognize.

REFERENCES


