In today’s economy, institutions of higher education are invaluable forces of community change through both the students they educate and the engagement and advancement of the larger community. Economic forces are bringing an increasingly diverse student population to the doorsteps of these institutions compared with the past. To achieve maximal effectiveness in reaching these students, paradigm shifts are needed in the ways teaching and learning are understood and actualized on campuses. This white paper outlines key conditions for change, as well as strategies for success, in this new era of higher education.

PARADIGM SHIFTS

As described in *America’s Perfect Storm* (Kirsch, Braun, Yamamoto, & Sum, 2007), the socioeconomic survival of the United States is at stake. The convergence of low literacy levels, poverty, an aging population, immigration, and the globalization of business means that working with the growing and significant segment of the population that comes from generational poverty is no longer a moral obligation; it has become an economic imperative. Two-thirds of the students who enter higher education do not complete a degree within six years, and among low- and moderate-income students, the statistics are even grimmer. The “college readiness” agenda pioneered by John N. Gardner (founder of the National Resource Center for the Freshman Year Experience and Students in Transition, University of South Carolina, Columbia) and further enhanced by Skip Downing (an international consultant in the field of faculty development and student success strategies) must be supported with content and methods more relevant to under-resourced students. This will enable them to have the essential tools, language proficiency, and analytical skills that higher education often assumes is operative across all social classes in our society.

Under-resourced students have limited access to external resources, such as support systems, mentors, and money. Their lack of supports make external demands – like childcare, transportation, one or more jobs – develop into crises that, time and again, derail their education. Postsecondary classrooms require cognitive, language, and relational resources that may not have been developed in K–12 schools, neighborhoods, and family. Vocabulary is often insufficient for understanding texts, class discussion, and writing assignments. Without the advantage of the inter-generational transfer of knowledge that enables students to embrace the college experience, many students feel both out of
place and doomed to failure. The effect of such a lack of resources is well-documented (Bailey & Alfonzo, 2005; Bailey, Jenkins, & Layback, 2005; Brock, 2006, 2007; Hill, 2008; Kirsch, et al., 2007; Prasad & Lewis, 2003) and visibly profiled in the demographics of low student persistence, retention, completion, and graduation rates across the country, in particular for such student groups as Latinos and African Americans, whom the educational systems generally have not served as well as Caucasians (Hill, 2008).

- Only 30% of students assigned to Introductory English and 20% to Introductory Math completed the course within three years.
- “Of first-time college students entering a community college in 1995, only 36% earned a certificate, associate’s [degree,] or bachelor’s degree within six years” (Brock, 2007).

Meanwhile, across the nation, government, business, and communities are asking for changes in the very nature and premise of higher education. In the community college systems of the country where the majority of under-resourced learners are pursuing higher education, there are even greater challenges. A recent California report indicates that too many students who are behind in their skills are not overcoming their deficiencies in the state’s community colleges, even though significant budget resources are being allocated for this purpose (Hill, 2008). Stakeholders are demanding stronger linkages between education and jobs for a more productive economy. Accreditation bodies are convincingly arguing for more rigorous accountability standards for student learning outcomes, while at the same time calling for major curricular changes to more realistically reflect the need for greater civic engagement. The latter is intended to instill creative and reflective thinking, skills necessary for active participation in society. There is a growing interest in improving the connection between teaching and learning through professional development and the alignment of faculty incentives and rewards in order to better defuse the need for new modes, media, and methods for more contemporary instructional delivery systems.

REFORMULATING THE PREMISES OF HIGHER EDUCATION

<table>
<thead>
<tr>
<th>Traditional Paradigms</th>
<th>New Paradigms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td></td>
</tr>
<tr>
<td>Students prepared with internal and external resources,</td>
<td>Serving under-resourced students with multiple</td>
</tr>
<tr>
<td>focused on educational priority</td>
<td>learning barriers, less-than-ideal background preparation, and competing</td>
</tr>
<tr>
<td></td>
<td>demands brought on as a result of highly complex life conditions</td>
</tr>
<tr>
<td>Faculty and Instructors</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Discipline specific experts</td>
<td>Faculty as learning facilitators using discipline-specific expertise to engage students</td>
</tr>
<tr>
<td>Unsupported, autonomous, competitive learning environments</td>
<td>Supported, relational, cooperative learning environments</td>
</tr>
<tr>
<td>Didactic teaching</td>
<td>Knowledge created through service and community engagement models involving multiple individuals from diverse backgrounds, formal planning documents, and work for a given cause</td>
</tr>
<tr>
<td>De-contextualized and theoretical knowledge</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students seen as remedial, high-risk</td>
<td>Students seen as problem solvers and creators</td>
</tr>
<tr>
<td>Students isolated from each other and the community in the learning tasks</td>
<td>Contextualized and situated learning connects students to each other and to the community in the learning tasks</td>
</tr>
<tr>
<td>Enrollment</td>
<td>Student retention, persistence, achievement, and completion as top priorities</td>
</tr>
<tr>
<td>Faculty-driven scheduling</td>
<td>“Working-student friendly” class scheduling</td>
</tr>
<tr>
<td>Pricing and funding</td>
<td>Focusing on cost and value as the instructional recipe for student success</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of human and social capital secondary to scholarship and research</td>
<td>Intentional structured development of human and social capital for achievement, sustainability, and prosperity</td>
</tr>
<tr>
<td>Institutional outcomes connected to self-sustainability and infrastructure</td>
<td>Institutional outcomes become connected to community sustainability</td>
</tr>
<tr>
<td>Accreditation based on institutional asset and fiscal resources</td>
<td>Accreditation based on learner outcomes</td>
</tr>
<tr>
<td>Lack of concern for accountability</td>
<td>High accountability</td>
</tr>
</tbody>
</table>

These paradigm shifts call for changes across the board – from the classroom level to student services, from accreditation standards to the institution’s partnerships. This is not to say that traditional higher education is obsolete or misguided but rather that the traditional expectation that students will mold themselves to the institution’s expectations and norms is simply too big a leap for too many students, many of whom are in the under-resourced category. While these major paradigm shifts are
occurring simultaneously and sometimes overwhelmingly, a synergy exists among them, which, if properly tapped into, can be transformational for students, staff, the institution, and the larger community.

PROMISING PRACTICES

There is no shortage of ideas for improving the effectiveness of college and university education. More than 90 interventions to improve outcomes for under-resourced students were recently funded under the Achieving the Dream community college program. These strategies are significantly influenced by a growing concern to address the four principal causes of poverty identified by DeVol (2004) – the choices of the poor, human and social capital in the community, exploitation, and political/economic structures – and the negative effects that poverty conditions are bringing to the classroom. Most faculty- and student service-driven interventions target the individual student, seek to build support around the student … or both. For example:

- Developmental education and ongoing consistent support services for academically underprepared students work best when delivered by full-time staff with specialized training. These are two of the most necessary interventions to get students college-ready (Bailey & Alfonzo, 2005).

- Financial incentives have a positive effect on student persistence, full-time attendance, courses passed, and re-enrollment. Incentives are a concrete representation of the value of education and achievement. However, the encouraging results ended when the incentives ended (Brock & Richburg-Hayes, 2006).

- Advising, counseling, and peer tutoring are ways to provide some social capital or relationship support for students. First-semester freshman seminars, for example, are effective in teaching students how to manage their academic work within the academic environment through orientation and direct-teaching of planning and study skills (Bailey & Alfonzo, 2005).

- Student integration programs concentrate on external resources, such as supportive relationships, employment, and money as the primary causes of student retention. Scheduling to accommodate the needs of working students and creating meaningful interactions among students and teachers are effective interventions (Bailey & Alfonzo, 2005).

- Service/learning integrates community service experiences with academic instruction as it focuses on critical reflective thinking and civic responsibility (Robinson, 1995). Students move from mediated sources of information to experiential learning in which they practice skills and roles.
• Learning communities also seek to build social capital on campus through shared academic experiences. Learning communities enroll student cohorts in clusters of courses, often around a central theme, thus promoting a deeper academic inquiry, cooperative learning opportunities, and relationships with both peers and faculty. For students with many other demands on their time, this model works well when it provides an engaging, motivating environment that does not require them to spend time in activities outside of classes. Learning communities have the most empirical evidence of success (Bloom & Sommo, 2005).

Improved outcomes are modest. A major flaw in most programs is the well-intentioned though misguided “righting reflex” (Miller & Rollnick, 2002). The righting reflex cuts directly to the corrective action, without creating an understanding of what issues are being addressed, nor explaining why the situation or condition occurred. Many programs operate without intentional understanding of what an under-resourced student is – and why this occurs – before prescribing how students should change. There is a need to make higher education more learner-centered so that the educational experience increases in value and promotes a more genuine learner agency that teaches autonomy, engagement, and mastery. To do this, higher education must surmount a wide range of hurdles and organizational barriers that under-resourced students experience between the real world and their academic community.

As students demand greater control over their learning, institutions struggle to engage the commuter student and the working student in the extracurricular activities that create social networks of peers and mentors necessary for life’s success. New media and technologies like blogs, wikis, media-sharing applications, and social-networking sites can become vehicles for informal conversations, collaborative content generation, and knowledge sharing that give learners access to a wider range of ideas and representational skills to demonstrate their learning. Creating the access to, and ability to use, these technologies is as important as developing the sites and programs themselves.

MAKING SENSE OF IT ALL AND PUTTING THE PIECES TOGETHER

A new level of integrated strategies focused on a better understanding of the pedagogy for working with the outcomes of poverty (Becker, Krodel, & Tucker, in press) provides the framework to build new instructional programs, transform student learning, and create a vibrant participatory environment that taps students’ problem-solving skills and supports student persistence and completion. Students are no longer viewed as passive recipients of knowledge but rather as active producers of knowledge, given the social and economic reality in which they are operating – a world
much different from that of their professors. The system works for today’s students who seek greater control of their own learning in contextualized settings that relate to their everyday life.

This approach requires trained staff/faculty and the commitment of administration, all drawing on the knowledge and problem-solving skills of under-resourced students to address the multiple causes of poverty. This framework also builds beneficial partnerships and addresses some of the more challenging accreditation issues.

Using the causes of poverty as a framework and economic class as a lens,

students and faculty develop a new landscape within which to build knowledge, skills, relationships, and resources.

The concepts and strategies of aha! Process, Inc. integrate teaching and learning by first “meeting the students where they are” and then guiding a process of self-discovery and cognitive transformation. This practical approach allows staff persons to apply and practice what they seemingly “already know” but had not previously given meaning to. The model exceeds the 16 Student Learning and Development Outcome Domains set forth by the Council for the Advancement of Standards in Higher Education (Dean, Ed., 2006). aha! Process, Inc. offers materials, professional development, and consultation to implement three approaches:

I. The Getting Ahead curriculum that can stand alone or be integrated into civic-engagement strategies (DeVol, 2004).
II. Relational and cognitive teaching strategies (Becker, et al., in press).
III. High-impact civic engagement that amplifies the effect of experiential learning and can generate systemic change (Becker, et al., in press).

I. The Getting Ahead curriculum is intensely engaging for students because it allows them to investigate and discuss with peers an all-important topic – their lives, families, and the impact of economic class.

Getting Ahead provides the bridge between the “situated learning” style (Lave & Wenger, 1991) and circumstances of the under-resourced student and what is expected for educational and work/life success (Brown, Collins, & Duguid, 1989). Situated learning occurs in a context within a set of relationships and social norms. For newcomers, the purpose is not to learn from talk as a substitute for meaningful participation but to learn to talk as the key to legitimate participation (Lave & Wenger, 1991). This participation creates a shared repertoire of communal routines, behaviors, and vocabulary
(Wenger, 1999) and fosters the relationships and extra support needed to move to formalized or decontextualized education.

Pedagogically, a facilitator guides the group’s co-investigation of the four causes of poverty (choices of the poor, human and social capital in the community, exploitation, and political/economic structures) and their effects on individuals and society. Tacit knowledge bases – including how to use hidden rules of the three economic classes (poverty, middle class, wealth), building resources, and cultural diversity – are explored. Students translate their thinking from concrete to abstract by building mental models or paradigms. The facilitator works collaboratively to review, edit, and apply quality-assurance approaches to students’ work through learning opportunities that draw on Surowiecki’s “wisdom of learning from the crowds” theory (Surowiecki, 2005). The process creates learner-generated content that is not prescribed by teachers acting as dispensers of information but rather content discovered and created by the students as they become actively engaged in the construction of the knowledge base they perceive to be needed in their real world.

*Getting Ahead* is designed to create spaces of cognitive dissonance where new learning can occur, then offers concrete strategies that provide a means to act upon knowledge and create a new “future story.” Long-term assignments involve assessing and planning to develop resources, learning about exploitation, and analyzing political/economic structures that influence wealth. Community assessment exercises encourage debate about the outcomes of poverty, as opposed to fixating on the causes of poverty, and strategies to address institutionalized classism. Upon completion, students have moved from the concrete, situated-learning style developed while growing up in a low-resource environment to reasoning with causal models at ever-higher levels of abstraction. Students are prepared to participate at the planning tables of middle-class institutions, such as schools and businesses. This material and the investigative process lend themselves to service/learning and community engagement strategies – and speak to many of the paradigm shifts described below.

<table>
<thead>
<tr>
<th><strong>New Paradigms</strong></th>
<th><strong>Getting Ahead /aha! Process Solutions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contextualized and situated learning connects students to each other and the community in the learning tasks</td>
<td><em>Getting Ahead</em> uses economic class as the context for a cooperative investigation that is personally relevant and evidenced in the community</td>
</tr>
<tr>
<td>Students seen as problem solvers and creators</td>
<td><em>Getting Ahead</em> moves students from reactive problem solving to proactive planning, knowledge creation, and “future story”</td>
</tr>
<tr>
<td>Supported, relational, cooperative learning environments</td>
<td><em>Getting Ahead</em> investigative group process provides the vehicle</td>
</tr>
</tbody>
</table>
Focusing on cost and value as the instructional recipe for student success

- Students: teaches/reinforces value of education; puts cost of education in context of current versus future stability and personal choice
- Institutions: Easily adaptable to existing programs at little cost
- Increased retention is cost-effective

Student retention, persistence, achievement, and completion as top priorities

- Resource assessment provides affirmation and leads to clear personal plans to build resources for academic achievement
- Creates “future story”
- Relational learning increases social capital

Class scheduling is “working student friendly”

- Students are equipped to participate in planning

Getting Ahead also develops understanding about economic class for students in career tracks leading them toward work with clients, students, and co-workers from generational poverty. Within disciplines, these theories are relevant as well (for example, in the history of jazz or certain literary genres).

II. More can be done to improve education by improving the effectiveness of teachers than any other single factor (Wright, Hom, & Sanders, 1997). Professional development based on an understanding of the effects of economic class transforms faculty understanding of how instructors teach – and how students learn, react, and respond. That knowledge then informs application of teaching strategies for developmental education, first year, and some content courses. There are two aspects of the teaching strategies:

- Strategies that build relational learning and bridging social capital (the relationships with people outside one’s personal circle who can help one achieve goals)
- Strategies that build language resources and cognitive ability

Relational learning models based on the work of Greenspan and Benderly (1997) and Marzano (2007) might help instructors and staff develop the bridging social capital so essential to student success. When faculty learn to balance support, insistence, and high expectations – as well as to value students’ problem-solving abilities without diminishing standards – faculty, in turn, are rewarded with more successful students and improved teaching assessments.
Cognitive teaching strategies based on Feuerstein (1980) and Payne (2003, 2008) may help students build mental resources and “teach students how to learn.” They actually build the cognitive structures necessary to support abstract learning at the postsecondary level. For example, mental models create bridges between concrete thinking of home and neighborhood and the abstract thinking of school and technical/professional work. Other examples of classroom techniques include in-class assessment of student learning using integrated audience response systems during class to immediately assess student learning, providing grading rubrics when the assignment is given, and directly teaching and grading the processes needed for task completion.

<table>
<thead>
<tr>
<th>New Paradigms</th>
<th>Teaching Strategies – aha! Process Solutions</th>
</tr>
</thead>
</table>
| Serving under-resourced students with multiple learning barriers, less-than-ideal background preparation, and competing demands brought on as a result of highly complex life conditions | • Teaching strategies build cognitive structures  
• Mental models build abstract thinking  
• Explores tacit knowledge bases (such as using hidden rules and building resources to move toward economic stability)  
• Relational learning models balance support, insistence, and high expectations |
| Accreditation based on learner outcomes | • Teaching strategies address cognitive deficits caused by poverty  
• Investigative process engages, motivates, and improves retention |
| Faculty as learning facilitators using discipline-specific expertise to engage students | • Professional development builds understanding of the hidden rules of class and how poverty affects driving forces, resources, and cognitive development  
• How to balance support, insistence, and high expectations |
| Supported, relational, and cooperative learning environments | |

III. Education prepares citizens for participation in the economic/political structures that create our society and can be a cause of poverty. The theories of economic class offer program ideas that support service/learning and civic-engagement strategies in a robust and rewarding way. The framework also supports the new demands of accreditation bodies for the institutionalization of student engagement and what practitioners (Valverde, Ed., 2008) are calling the acquisition of “life journey” skills, attitudes, and mindsets that all individuals need to tap as they evolve and develop from childhood to adulthood. For example:

Learning communities can integrate Getting Ahead as the context for courses (developmental reading, sociology, anthropology, etc.) in which students read about the outcomes of and reasons for
poverty in the United States, thus informing the group discussions. Students might translate the casual group discussion into formal register, supported by their research, in a composition course, thereby building language skills required for success in education and technical/professional careers.

Service/learning and community engagement assignments can then be addressed by student teams drawn from these learning communities. In essence the framework of economic class provides a relevant construct within which to analyze and act, while the Getting Ahead co-investigation provides the vehicle. Using the campus as the context for the investigation of community resources could create a salutary secondary impact on the institution’s student services. Students might investigate and assess the school’s capacity to serve under-resourced students, thereby contributing solutions for the redesign of programs. In such an educational construct, students experientially learn skills that prepare them to “sit at the table” and participate in planning – skills necessary for responsible civic engagement.

If the faculty and staff have been trained in theories of economic class and cognitive and relational teaching models – and students investigate economic class in a learning community that includes community engagement assignments within the campus setting – then the institution has created an environment that provides under-resourced students authentic access to the power structures that govern institutions. It also has created the conditions for constructive and positive change.

The campus itself becomes the socioeconomic case study. Students practice skills and engage in the act of planning within an actual institution. All this can happen in class or as assignments in a course with content-appropriate research topics. Meanwhile, the institution taps into the wealth of knowledge and ideas of the students that otherwise would go unrecognized and unused.

Examples of institutional solutions offered by postsecondary students who have participated in the Getting Ahead curriculum include:

- Providing childcare on or near campus
- Web-based orientation and course delivery
- Accessible, student-friendly scheduling of classes
- E-mail buddies/mentoring
- Entire-family outreach
- Meeting one on one with a faculty/staff adviser once every two weeks (either in person or through e-mail)
- Recorded classroom instruction available in electronic formats for review
- Availability in the library/media center of exemplary student products/completed assignments
Educating teaching and support staff in relational and cognitive teaching strategies, combined with the *Getting Ahead* curriculum and investigative process, can become a major asset for institutions adapting to shifting demographics and educational paradigms.

<table>
<thead>
<tr>
<th>New Paradigms</th>
<th>High-Impact Civic Engagement – aha! Process Solutions</th>
</tr>
</thead>
</table>
| Intentional, structured development of human and social capital for achievement, sustainability, and prosperity; institutional outcomes become connected to community sustainability | • Teaching strategies + *Getting Ahead* curriculum intentionally teaches hidden rules of middle-class success behaviors through co-investigation  
• Education = economic development = sustainable communities                                                                 |
| Knowledge created through service and community engagement models involving multiple individuals from diverse backgrounds, formal planning documents, and work for a given cause | • Multi-layered model incorporates *Getting Ahead* curriculum + learning community + service/learning focused on the outcomes and causes of poverty; is highly relevant to communities  
• Students, who have been prepared as leaders and change agents, drive economic growth                                                                 |
| High accountability                                                             | Students are empowered to hold institutions accountable and are prepared to participate in planning/strategizing                                                                 |

**BUILDING THE SYNERGY**

In the new postsecondary world being shaped by the emergent demography of under-resourced students, there is likely to be a continued blending of formal and informal learning. aha! Process, Inc. synthesizes the attributes of personalization, active participation, and new content creation that give value to the world of the under-resourced student, resulting in educational experiences that are far more productive, engaging, and community-based. This framework builds beneficial partnerships and addresses some of the more daunting accreditation issues. aha! Process offers innovative approaches that can be integrated at multiple levels to improve performance; inform students, staff, and educators; and adapt to new paradigms in postsecondary education.

For more information visit [www.ahaprocess.com](http://www.ahaprocess.com) or call (800) 424-9484.
REFERENCES


