Background. With support from the Bill and Melinda Gates Foundation first received in 2009, NCHEMS is engaged in a two year project centered on state policies that foster student progression and success in the “adult re-entry pipeline.” The adult re-entry pipeline consists of the many alternative pathways to obtain a postsecondary credential for individuals who did not complete high school and immediately go on to successful college-level study. Prominent components of this population include young adults (aged 25-34) a) who never finished high school, b) who began postsecondary study but for various reasons did not finish and, c) who never enrolled in postsecondary study. Previous work by NCHEMS has documented the importance of harnessing this route to a postsecondary credential if the U.S. is to achieve the levels of postsecondary attainment among young adults that is typical of the best-performing Organisation of Economic Co-operation and Development (OECD) countries. There is also good evidence that young adults can benefit substantially from relatively short encounters with postsecondary study. For example, a study on young adults beginning in Adult Basic Education experienced notable increases in income after earning twelve academic credits culminating in a certificate or credential.¹

Established state and federal policies targeted at access and success are centered largely on the traditional path to college. This path focuses on 18-year-old high school graduates who enter postsecondary study within eight or nine months after earning a high school diploma. Prominent among these policies are college awareness and access programs, targeted financial aid, “bridge” programs such as early college high schools, and college-skills development programs. In a growing numbers of states, such policies are aligned and coordinated in the context of an intentional “P-16” strategy for improving student success. In contrast, state policies aimed at promoting student success in the adult re-entry pipeline tend to be fragmentary and not systematically aligned. Probably more important from a national perspective, they are not well documented or are unknown altogether.

A vital prerequisite to achieving the goal of improved student flow through the adult re-entry pipeline is better understanding of its component populations and the kinds of policies aimed at promoting their success. This is an area which has to date received very little systematic treatment by policy analysts or academicians. As a consequence, definitions are murky and analytical frameworks underdeveloped. A first task here is therefore to develop a detailed taxonomy of the population in need. A second task is to more fully describe the intersection between these various components of the population in need and different modes of participation in postsecondary study. A final component is to create a taxonomy of state and national policies

¹ See Prince, David and Jenkins, Davis (2005). Building Pathways to Success for Low-Skill Adult Students: Lessons for Community College Policy and Practice from a Statewide Longitudinal Study. New York: Community College Research Center (CCRC), Teachers College, Columbia University.
that will potentially affect each population component at each transition point in the adult re-entry pipeline. The purpose of this document is to present results of these taxonomic efforts as a prelude for later survey and state case study work.

**Conceptualizing the Adult Re-Entry Pipeline.** Two main sources will have to be tapped to rectify this shortfall in the traditional educational pipeline. One comprises adults who have graduated from high school but have not completed a college credential. In the population aged 25-64, about 29.2% never went to college and 19.4% attended college but did not complete a degree. The objective for this component of the “re-entry” pipeline is to enroll adults in postsecondary study and ensure that they earn a credential. The other, more challenging, component consists of the 13.3% of the adult population who never completed high school. Many of these individuals may face basic literacy challenges as well. One objective for this population is to address skills shortfalls through Adult Basic Education (ABE), gain a high school credential by completing a GED, then enter postsecondary study.

![Figure 1](image)

**The Adult Re-Entry Pipeline**

As shown in Figure 1, each of these starting points is followed by a chain of transitions that define “flow” through the pipelines that are affected by three factors: a) the characteristics and circumstances of the individuals involved (as well as the barriers to re-entry and progress that these circumstances create), b) the particular type and mode of participation in postsecondary...
study and, c) the array of state and federal policies that can promote or inhibit the probability of individuals with particular characteristics in engaging in particular modes of participation. As illustrated by Figure 2, this yields a three-dimensional conceptual basis for creating a taxonomy.

Figure 2
Basic Taxonomic Dimensions

<table>
<thead>
<tr>
<th>Population Characteristics</th>
<th>Modes of Postsecondary Participation</th>
</tr>
</thead>
</table>

State and Federal Policies

The conceptual space to be mapped in this way defines a cell for each intersection between each population, each mode of postsecondary participation, and each potential governing policy. In order to do this, each of the three dimensions must be disaggregated. This is accomplished in the sections that follow.

**Taxonomy of the Adult Learner Population.** Simply defining the “adult learner” population in the U.S. is a significant challenge. The most common definition is based simply on age. For example, most studies define “adults” as individuals aged 25 or older. But using a definition based entirely upon age may miss a large number of younger people who *behave* like adults with respect to educational participation. For example, a significant proportion of those enrolled in postsecondary education can also be categorized as “nontraditional students,” as defined by the
National Center for Educational Statistics (NCES). According to NCES, nontraditional students exhibit one or more of seven characteristics:

- Have delayed enrollment into postsecondary education
- Attend part time
- Are financially independent of their parents
- Work full time while enrolled
- Have dependents other than a spouse
- Are a single parent
- Lack a standard high school diploma

By this definition, many younger people attempting to enter and complete postsecondary education in America may face the same barriers and challenges as “adults” identified as such simply because of their age.

In contrast, adult citizens who are potential participants in the adult re-entry pipeline are defined by their shortfalls with respect to educational attainment. This “population in need” comprises three broad components: a) young adults who are high school drop-outs, b) young adults who did not immediately attend college after successfully earning a high school diploma and, c) high school graduates who enrolled in college and did not finish. For example U.S. Census Bureau figures for 2005-07 indicate that a total of 8,693,231 individuals in the U.S. aged 18-34 have not graduated from high school (3,313,521 in the 18-24-year-old age group and the balance in the 25-34-year-old age group). At the same time, a total of 9,447,694 citizens in that same age group enrolled in college but had not attained a degree (2,728,712 in the 18-24-year-old age group and the balance in the 25-34-year-old age group).²

Within these three broad populations, it is possible to distinguish individuals on the basis of a set of straightforward, but important subpopulation characteristics, which are briefly discussed in the subsections that follow.

- **Demographics.** The most important of these are gender and race/ethnicity. And it is increasingly important to consider the discrete intersections of these two variables and not just use them as bivariate breakdowns. Male Hispanics and African-Americans, for example, tend to behave quite differently with respect to actively seeking and persisting in higher education than their female counterparts, and these differences are especially marked within the young adult population. As the example above illustrates, moreover, similar behavioral differences make it advisable to distinguish the youngest component of

the young adult population (individuals aged 18-24) from its older component (individuals aged 25-34). Among other things, for example, individuals in the younger component will have very different patterns of participation in the workforce, as well as a lesser likelihood of having additional obligations such as dependent children.

- **English Language Skills.** The vast majority of postsecondary instruction in the U.S. is delivered in English. As a result, those not fluent in the language, or not able to speak it at all, are at a significant disadvantage. In addition to its direct impact, moreover, limited English speaking ability may also signal the presence of an important cultural or experiential shortfall with respect to higher education. If the individuals involved are U.S. residents or citizens, their membership in a non-English-speaking language community is frequently related to other risk factors such as low socio-economic status or isolation from mainstream culture. If they are immigrants or foreign nationals, similar conditions of cultural isolation are imposed by lack of familiarity with what is customary in U.S. institutions and limited ability to navigate the wider social environment. These conditions have both direct effects on postsecondary participation and may indirectly condition their motivation to participate because of lack of self-confidence or the perception that they can succeed.

- **Family Income.** Numerous studies have shown that postsecondary participation varies decisively by family income level. Indeed, among the just-out-of-high-school population, those in the highest income quintile are substantially more likely to enter higher education than those drawn from the lowest. Large differences in college attendance and completion rates have also been demonstrated for individuals whose family incomes are less than twice the official poverty level. Low income individuals are, first of all, less able to pay the direct costs of attending college. If they use loans to finance attendance, moreover, lower-income students are typically less likely to tolerate carrying large loan balances. In addition, they may be less able to defer current earnings in order to enroll—especially if they try to enroll on a full-time basis. Finally, family income functions as an effective surrogate for socio-economic status, which has its own influence on higher education enrollment. As in the case of limited English skills, those drawn from the lower end of the family income continuum will probably have acquired less knowledge about the benefits of earning a postsecondary credential and therefore be less inclined to participate. And they will probably know even less about what it is like to participate—what will be expected of them and the kinds of behaviors and commitments they must be prepared to meet. All of these are known to be challenges among traditional students and they will likely be at least as important as factors governing participation and success among young adults.

- **Dependents.** Despite the correlation between age and the likelihood of having to care for dependents in the young adult cohort, this situation is of sufficient salience to postsecondary enrollment behavior to warrant its own status as a classification variable. The need to care for dependents has been repeatedly shown to be related to both postponed entry into college and lack of persistence for students who do enroll. Caring for dependents diverts resources that might otherwise be used to pay for college. At least as important, it diverts attention from college work in a way that may force part-time
attendance and lessened time on task to attend classes and complete assignments—both risk factors for dropping out. Sometimes, moreover, these diversions are episodic and difficult to predict—for example, the need to care for a sick child—that cannot be accommodated by fixed class schedules and inflexible attendance policies. Finally, many individuals in these populations may be caring for older adult dependents who are infirm or lack resources of their own.

- **Employment Status.** Most of those currently enrolled in colleges and universities are employed in some capacity, and this includes both traditional students and adults. Employment as a source of income, of course, is a good thing insofar as it enables potential students to meet with confidence the cost of attendance. But numerous studies also suggest that employment, especially full-time employment, can impede student progress and success by diverting time and attention that should be spent studying or participating. Adult student success in postsecondary study may also depend on the type of occupation a student is engaged in. Many adult programs—for example, business programs at institutions like the University of Phoenix—take advantage of a student’s employment situation by using situations that arise on the job the basis of course projects or case studies. Others make use of internships, cooperative education, or deliberate job placements as integral parts of the educational program, where it helps if the student is already employed in the right kind of setting. Here, management and professional jobs will be suitable as the basis for such applications where blue-collar job settings, with the exception of specific vocational certification programs, will typically not be suitable.

- **Incarceration.** Another underserved young adult population consists of individuals who are currently in the penal system. Many of these people are drawn disproportionately from poor and minority backgrounds, so are likely to have difficulties finding employment after release in any case. Allowing them to earn a postsecondary credential while they are otherwise unoccupied is thus a win on several dimensions. Not only does every credential earned contribute to the national goal, but it also provides a potential route to rehabilitation. While many institutions currently run programs in the prisons, they are not as extensive or aggressively promoted as they might be. But there are outstanding examples of programs that employ dedicated teaching staffs and have enjoyed high rates of student retention and completion as a result.

- **College Readiness.** Finally, success in postsecondary study for all kinds of students depends a great deal upon the extent to which entering students are academically prepared in such basic skills areas as reading, writing, and mathematics. For adults, college readiness in these abilities may be especially relevant because they have atrophied since high school because of lack of practice. This may also mean that only portions of a given area—calculating proportions, for example—may need remediation, rather than the entire quantitative skills domain. Despite the importance of college readiness, however, there are no national estimates of the numbers of each of the three adult re-entry pipeline populations in need that are college ready in basic skills. Some indication of the magnitude of these proportions, however, is suggested by results of the National Assessment of Adult Literacy (NAAL), which show that literacy levels vary strongly by level of education.
These basic elements of the taxonomy describing adult learners may act independently to condition progress toward a credential for adult learners. But they more frequently act in combination and multiplicatively reinforce each other. A family income close to the poverty line, employment in a low status job, and membership in an underserved minority group, for example, can combine to lower the probability of successful completion because of lack of self-confidence and resources more than each of these factors acting independently. Similarly, holding a full-time job and having a large number of dependent children can combine to threaten progress by limiting the amount of time that can be devoted to college work.

**Taxonomy of Modes of Participation.** The past ten to fifteen years has seen considerable diversification in modes postsecondary instructional provision. New types of both providers and provision have entered the postsecondary education space. While these changes have affected all types of students, adults tend to participate in some of them disproportionately.

- **Provider Type.** While increasing numbers of adults enroll in traditional credit-bearing courses that lead to a degree or certificate, the majority of adult provision is provided outside established colleges and universities. The largest component of regular credit-bearing enrollment for adults is in the public two-year sector, where students aged 25 and above constitute more than 40% of total enrollment. The most rapidly growing sector for adults is private for-profit institutions, which now constitute more than twelve percent of the nation’s enrollment, more than half of which comprises students aged 25 and above. But according to the National Education Household survey, only about a fifth of adults have attended an established college or university, compared to more than half who have received instruction through a business or employer, and another fifth receiving instruction through a government agency or professional association. Because these alternative forms of provision do not necessarily lead to a degree or certificate, they may not directly contribute to achieving the national attainment goal. But if ways can be found to recognize the learning that results from this significant body of postsecondary study, its indirect value in attaining national goals may be considerable. Finally, it is important to emphasize that adult participation in postsecondary study can be episodic, involving multiple institutions over time. So classifications need to reflect the fact that multiple provider types may be touched by a given adult, with credits or experiences ultimately certified through capitation by the last provider in line.

- **Program of Study.** Adults enrolling at established credit-bearing institutions can seek credentials in a familiar array of fields including Arts and Sciences, Science, Technology, Engineering and Mathematics (STEM), Business, Education, Health, and Vocational/Technical. Compared to traditionally-aged students, however, they tend to enroll more heavily in applied fields. Adults enrolling at providers beyond the established credit-bearing universe almost exclusively enroll in such fields. Unlike traditional students who frequently change their programs of study, moreover, adult students tend to continue enrollment in a particular field until they either drop out or finish.
• **Mode of Delivery.** Like their younger counterparts, adult students participate in postsecondary study in an increasing variety of modalities. These include traditional face-to-face instruction, synchronous or asynchronous distance delivery, and mixed modes between these two that involve both participation at a distance and periodic face-to-face learning situations. The latter mode is characteristic of a growing number of professional masters programs offered by both private not-for-profit institutions (e.g. Fielding Institute) and for-profit institutions (e.g. University of Phoenix, Ashford University, and Capella University) that have proven especially popular with adults.

• **Curriculum Design.** Adult students also participate in postsecondary study using a considerable variety of curricular designs in addition to traditional term-based courses in which content is delivered and credits/grades awarded. Prominent among these alternative curricular designs are:
  
  o Cohort approaches in which students beginning their programs at the same time are kept together as they participate in a standard sequence of learning experiences successively.
  
  o Mastery-based approaches in which students progress at their own pace by demonstrating their achievement through a series of content or skills modules with associated assignments and performance assessments.
  
  o Accelerated approaches in which the curriculum covers content or material in a compressed format such as eight-week or five-week terms encompassing the same amount of material traditionally taught in a sixteen-week term.
  
  o Coop or internship based approaches in which a substantial proportion of the overall learning experience consists of internships or field placements selected by students or created by the provider; a variant of this approach is use of students’ own workplace, where relevant and appropriate, as the locus for a significant portion of their learning experience.

All of these features are now prominent within adult-serving institutions, both for-profit and not-for-profit.

• **Intensity of Attendance.** Finally, adult students are more likely than their traditional counterparts to be enrolled on a part-time rather than a full-time basis, as well as to interrupt their progress by stopping in and out. Some of these behaviors are deliberate, but most are determined—or at least modulated—by the demands of work and family that distinguish them from just-out-of-high-school college students.

As in the case of student characteristics, these variables describing how adult students participate in postsecondary study cross-cut one another to yield a complex array of potential paths in pursuit of a credential. Further, adult students may be participating in more than one combination simultaneously. Given this situation, the challenge for state policy, both simultaneously and building on a growing body of findings from research, is to determine how
best to induce institutions to adopt promising practices and to assist students to enter the re-entry pipeline, to progress, and to attain a credential.

**Taxonomy of State Policies and Practices.** As in other areas of higher education policy, states can affect how adult learners move through the re-entry pipeline through four fundamental policy levers—finance, direct programmatic initiatives, regulation, and information. These state policy levers differ fundamentally with respect to appropriate targets (institutions, learners, employers, students and potential students, etc.), relative effectiveness with particular populations, and range of applicability. More importantly, they can reinforce one another, cancel each other out, or operate in isolation from one another.

- **Finance.** Resource allocation is rightly recognized by most commentators as the most powerful lever for influencing institutional and citizen behavior in the state’s public policy arsenal. State subsidies to public institutions, though they have been declining sharply as a proportion of institutional revenues in recent years, are the first and most important component of this lever. Although it frequently goes unrecognized because state funding mechanisms for state colleges and universities are constructed on a “cost recovery” basis, they operate in practice as a form of performance funding because they reward institutions for enrollment growth. This characteristic might be deliberately harnessed by states interested in promoting adult student success by enhanced subsidy levels for programming targeted particularly for returning adults. Differential support for targeted programs is already a feature of some state allocation mechanisms, usually provided on the basis discipline and by level. Sometimes, however, as illustrated by Texas’ enhanced support for developmental instruction in the 1980s and mid-1990s, it can be provided for targeted types of programs. A second approach aimed at institutions is performance funding itself. For example, institutions might be awarded “bounty” payments for each adult completing a credential in much the same manner as New York’s “Bundy Funds” pay independent institutions for every baccalaureate graduate they produce. And as the Bundy program also illustrates, such incentives can be flexibly provided to all types of colleges and universities, not just those that are public. Incentives based on performance can also be applied to multiple aspects of institutional success, as illustrated by the “momentum points” scheme recently implemented by the Washington State Board of Community and Technical College System. This scheme rewards institutions for numbers of students reaching particular enrollment or achievement milestones such as successfully exiting Adult Basic Education (ABE), completing any needed developmental education sequences, or earning a credential.

Another way of supporting adult student success is to provide incentives or subsidies to students to induce them to remain enrolled, make progress, or earn credentials. State financial assistance programs are the most common such incentive and can be specifically tailored to include features conducive to adult student success. Because adults frequently attend part-time, one of these is providing financial aid to students attending less than full time as forty states now do. Another is to create special assistance funds designed to provide one-time, “just-in-time” assistance that allows students to carry through the kinds of enrollment-threatening unanticipated life events like loss of employment or illness of a dependent that adults disproportionately experience. States
can also help facilitate adult student entry into and persistence in postsecondary study by establishing mechanisms to help them save for college. For example, Lifelong Learning Accounts (LiLAs) have been established in several states with technical assistance from the Council on Adult and Experiential Learning that feature tax-free savings contributions and matching state contributions at various levels.

- **Direct Programmatic Initiatives.** States can engage in a wide variety of programs to facilitate access and progress for adult students. Many of these are designed to accommodate re-entry for a population that either never experienced a college or university environment or have been long absent from it. Learning communities and first-year experience programs provide support for new entrants while socializing them for academic study. Similarly, contextualized instruction—an approach in which training for basic skills such as mathematics or communications is embedded in content learning of occupational skills in such fields as nursing—can help practice-oriented students develop these skills far more effectively than confronting them in isolation. Such practices, of course, are delivered by individual institutions and are unlikely to be statewide programs. But states can encourage them through subsidies, challenge grants, or publicity and training efforts.

More amenable to central provision are Adult Basic Education (ABE) or GED programs, which enable students who lack basic skills or have not earned a high school diploma to take the first steps toward college. States are organized in many ways to deliver such programs—through K-12 schools, community colleges, and community-based organizations—so the effective coordination of these players poses challenges in many cases. In this regard, states such as Washington and North Carolina in which sole responsibility for instruction in these areas is assigned to community colleges may have an advantage. Finally, states can offer a variety of accelerated or special degree programs to especially benefit adults. For example, Florida policies permit students to challenge any course at any public institution through an examination or performance and Connecticut offers students an opportunity to gain credits through Prior Learning Assessment (PLA).

- **Regulation.** Although less suited to facilitating progress among adult students, state regulation can also play a role. Reporting requirements, for example, can induce institutions to behave in particular ways through public displays of comparative performance. They can also succinctly communicate to institutions what the state values. Simply counting the numbers and proportions of undergraduate credentials earned by adults each year, for instance, can send a useful message to institutional leaders. Other relevant regulatory mechanisms include state ability to assign particular missions to particular providers, as illustrated by the example of assigning ABE to community colleges noted above.

- **Information.** States can also disseminate information that will directly or indirectly promote adult access to and successful performance in postsecondary study. A first step that any state can take in this regard is simply to promote the importance of the adult re-entry pipeline through as many channels as possible. As noted earlier, all but a few states...
cannot accomplish their share of the needed increases in postsecondary educational attainment without tapping the adult population. This suggests that it is natural to include increasing service to adults as an integral and visible part of their “public agendas” for higher education. It also suggests that state policy and higher education leaders frequently and prominently mention adult postsecondary access and success in public presentations and op-ed presentations. Finally, states can broaden the services provided by units that they directly operate and control to promote adult re-entry. For example, the Alaska Postsecondary Education Commission uses its network of job centers to deliver aptitude tests and provide information about how to enroll in the many training programs offered by its public community colleges.

Finally, the intentionality and coordination of state policy mechanisms in support of increased adult student participation and success is at least as important as the existence of the appropriate policies themselves. An array of policies that is redundant or contradictory is likely to be ineffective regardless of the quality of the individual policies themselves.

Next Steps. This taxonomy provides NCHEMS with a basic tool for designing specific data gathering and aggregation activities that will constitute the bulk of the Gates project on the Adult Re-Entry Pipeline. For example, the population and mode of participation disaggregation variables described above will be used in constructing State Profiles of the population in need in each state, using NCHEMS extensive data holdings on postsecondary participation (www.higheredinfo.org). Similarly, the state policy classification presented above will be used to design questions and topical headings for a fifty-state inventory of state policies to be undertaken later in the project and to structure a planned set of state case studies of effective policy practice.