

Ready or Not:

Student Perceptions of the College Readiness Binary and Arizona Move On When Ready

by

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ABSTRACT

In 2010, the Arizona Legislature established a performance-based diploma initiative known as Move On When Ready (MOWR). The policy relies on an education model designed to evaluate students' college and career readiness by measuring their academic ability to succeed in the first credit-bearing course in community college. Move On When Ready is a structurally oriented, qualification system that attempts to attain a relatively narrow goal: increase the number of students able to successfully perform at a college-level academic standard. By relying on a set of benchmarked assessments to measure success and failure, MOWR propagates a categorical binary. The binary establishes explicit performance criteria on a set of examinations students are required to meet in order to earn a high school qualification that, by design, certifies whether students are ready or not ready for college.

This study sought to reveal how students' perceptions of the policy and schooling in general affect their understanding of the concept of college readiness and the college readiness binary and to identify factors that help formulate those perceptions. This interpretivist, qualitative study relied on analysis of multiple face-to-face interviews with students to better understand how they think and act within the context of Move On When Ready, paying particular attention to students from historically vulnerable minority subgroups (e.g., the Latina (a)/Hispanic sub-population) enrolled in two schools deploying the MOWR strategy.

Findings suggest that interviewed students understand little about MOWR's design, intent or implications for their future educational trajectories. Moreover, what

they believe is generally misinformed, regardless of aspiration, socio-cultural background, or academic standing. School-based sources of messaging (e.g., teachers and administrators) supply the bulk of information to students about MOWR. However, in these two schools, the flow of information is constricted. In addition, the information conveyed is either distorted by message mediators or misinterpreted by the students. The data reveal that formal and informal mediators of policy messages influence students' engagement with the policy and affect students' capacity to play an active role in determining the policy's effect on their educational outcomes.

DEDICATION

For my father and mother who endowed me with invaluable gifts of curiosity,
compassion, and critical thought.

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CHAPTER 1

INTRODUCTION

On a late April evening in 2014, a local Arizona television station presented a human-interest story to round out its nightly news coverage. Airing after reports of the day's national and international events and just after the weather and sports, the segment opened with an anchor, seated at his desk, issuing an ominous warning to Arizona families. He cautioned that, as a parent, he and other Arizona families have a legitimate reason to worry about the future for their kids. Grimly, he noted that the college readiness of students graduating from Arizona high schools had fallen to an unacceptably low level. He then offered a ray of hope. Help had arrived in the form of a new education program for Arizona students. Focused specifically on college readiness, the program had been designed to address the state's growing concern.

With that as context, the images on the screen shifted from inside the studio to on-location footage of a young woman working busily with her instructor and peers in a community college physics classroom. The newsman's disembodied voice told the story of the young woman. He identified her as a seventeen-year-old student who had recently matriculated to college after graduating from high school the previous summer. The reporter explained that this student was not your typical college-goer. Instead, she had left "high school after her sophomore year with the little-known *Grand Canyon Diploma*." Viewers learned that to do so she had been required to "to take seven grueling tests... to prove she was ready [for college]" ("Grand Canyon Diploma," 2014).

Moreover, she was one of the first students in the state to meet the requirements for this new credential and the first to use it for early graduation from high school.

The segment continued, weaving in snippets of interviews with the student and her family to enhance the narrative. It spotlighted the uniqueness of this student's situation. Viewers learned of how she and her parents were handling the young student's socialization into an older, college-aged community. The family spoke of her ability to manage the rigors of college-level work and of how her ultimate goal was to pursue an advanced graduate degree at some point down the road.

Issuing assurances that the student had already proven herself fully capable of succeeding in her many academic and extracurricular endeavors, the report concluded with a strongly worded statement. It was a pronouncement of the Grand Canyon Diploma's new role in the education of Arizona students. The broadcaster conveyed the message as if imparting a vital truth. "The Grand Canyon Diploma is not a GED or some sort of high school equivalency test," he said,

It is also not just about getting out early. It's about not sitting in a chair in high school just because you have to. It's about going to college, whether you graduate in two years or four years, prepared to do the work. ("Grand Canyon Diploma," 2014)

Though this particular newscast did not purport to outline every contour of the Grand Canyon Diploma, it serves as an example of how education policy is often initially conveyed to the general public. On one hand, anecdotal narratives such as this might serve to build general understanding of an education policy; in this case, a policy that enabled a student to demonstrate academic preparedness for the next level of education

beyond high school, emphasizing how the policy enabled her to do so at a relatively young age. On the other, it is also possible that a brief, two-minute nightly news segment might just as easily conflate the operational facets of a policy with the policy's broader intent and scope in the minds of the audience.

In this particular example, the story keyed on the series of rigorous qualification exams the student was required to take, the specific academic curricula in which she was engaged, and the high school credential she eventually earned. Oddly, the policy that codifies the diploma (known in Arizona statute as Move On When Ready), was never referenced by the reporter, affording ample opportunity to muddy the audience's perception of the initiative.

This is not to say that media reports hold no value when trying to understand a policy. They do. For example, this particular story suggests how the Grand Canyon Diploma might be beneficial to students, families, and the state's push for college readiness. Relative to the student featured, the report clearly showed that she and her family were able to leverage the diploma to fit her educational needs. It was also made clear that policy gave the family the freedom to accelerate the student's academic trajectory. Moreover, chronicling this student's passage from high school to college after her sophomore year suggests to viewers that the new state program enables students to exercise postsecondary options at a relatively early stage in their schooling.

However, the story leaves unanswered some important questions about how stakeholders (students in particular) engage with an education policy such as Move On When Ready (described only as a 'program' in this particular news item). For instance, though the story offers glimpses into this student's thought processes and that of her

family, it is unclear how she was able to develop the agency to embark on the path she ultimately chose. Further, we might ask: What *factors* and what *actors* influenced those decisions? Who was responsible for conveying accurate information about the policy? From where did she derive the knowledge to leverage the new education policy into “early” graduation from high school? How can students activate the policy and, more importantly, are the policy's intent and implications clearly and equitably communicated to all students and their families?

This dissertation represents an effort to address such questions by examining perceptions of the Move On When Ready policy as reported by students enrolled in two Arizona schools participating in the initiative. In the process, it explores how implementation of the Move On When Ready policy and the schools' communication of the Grand Canyon Diploma affect students' understanding of the policy and its potential bearing on their educations.

In general, the findings underscore a basic conclusion that can be drawn from the example above: Messages and messengers influence students understanding of how and for what purpose a policy targeted to them exists. Moreover the data reveal that personal contexts, perceptions, and narratives conveyed in communication of an education policy influence how it might be understood and acted upon by various stakeholders. Each message is subject to primary and secondary filtering and formal and informal mediation. Put another way, personal experiences are mediated by the various actors in a community. These mediators significantly affect understanding (or misunderstanding) of policy. Mediators can convey an accurate depiction of the policy and its function or they can cloud understanding of the policy with inaccuracies and omissions.

With regard to understanding how a policy is perceived, the amount of influence, or gravity, a mediator exerts on a student has a direct bearing on that student's view of the policy. Reasonably, we can anticipate that stakeholders' conceptions of a policy will affect that policy's practical uptake – individually, locally, and within the education community more broadly. In other words, students' perceptions are likely to influence both the effectiveness of a policy's implementation and the educational outcomes the policy is designed to drive.

Background and Purpose of the Study

The argument over the use of economic indicators to evaluate education policy outcomes is a historically lively one (see e.g., Dewey, 1938; Becker, 1964; Freeman, 1976). Despite the lengthy debate, policymakers have consistently turned to monetary metrics as basic measures of educational efficacy (Jaeger, 1978; Shavelson, McDonnell & Oakes, 1991). Prominent American politicians such as President Obama and United States (U.S.) Secretary of Education, Arne Duncan (2012), along with the nation's business community – for example, the U.S. Chamber of Commerce (Spellings, 2012) – persistently identify postsecondary education as a hedge against poverty and, effectively, a prerequisite for an individual to obtain a high wage job. A typical high school graduate earns about 66 percent less during a 40-year working career than a bachelor's degree recipient (College Board, 2010). As a result, higher education degrees are now widely viewed as essential qualifications for establishing the economic security of individual citizens and the nation as whole. With educational attainment so strongly associated with personal earning, economic measures are likely to continue to drive the education policy conversation for the foreseeable future.

Estimates of future demand for a highly educated labor pool have fueled the call for policy changes in education. The U.S. Bureau of Labor Statistics projects a 16.5 percent increase in demand for college graduates – from 22.2 million in 2010 to 25.8 million – by 2020, yet the bureau estimates the production of postsecondary degrees in this country will fall short of that number by at least 3 million (U.S. Bureau of Labor Statistics, 2011). Carnevale, Smith, & Strohl (2010) offer even more aggressive estimates, suggesting that perhaps as many as 4.7 million additional workers with postsecondary credentials will be needed for the U.S. job market by 2018. Though the veracity of such claims has come under reasonable and well-argued scrutiny (see, e.g., Charet, 2013; Cappelli, 2014), the perceived “skills gap” continues to drive policy discussions at local, state, and federal levels.

Irrespective of whether supply for high skilled workers exceeds demand or vice versa, the jobless rate for individuals whose highest academic credential is a high school diploma is consistently about twice that of a bachelor’s degree recipient (College Board, 2010). This suggests future job seekers will be confronted with comparatively higher unemployment rates if they do not obtain advanced academic qualifications. Academic performance and educational persistence statistics for American high school students are further discouraging, particularly for students in large urban high schools where more than 50 percent do not earn a high school credential within five years of entering ninth grade (National Center for Educational Statistics, 2010). The widespread call for a college-educated workforce suggests that college readiness has become the gold standard for desired student outcomes.

Several other indicators suggest a majority of students will exit high school without being ‘college-ready.’ In short, they will be either academically or socio-culturally unprepared to meet the academic rigors of higher education, the social customs of postsecondary environments, or the entry standards for careers that require postsecondary degrees. A 2010 report indicated approximately 60 percent of first time community college students required remediation in either math or English (National Center for Education Statistics, 2010). In Arizona, a strategic vision report published by the Presidents of Arizona’s Community Colleges (2010) asserts:

... roughly half of all incoming community college students require at least one developmental course in math (this figure is as high as 82 percent in some districts), and 41percent require at least one precollege course in English or reading. Almost one-quarter (23 percent) of incoming community college students require three or more developmental courses. (p. 10)

These trends have led lawmakers, educators, and pundits to advance policies targeting increases in students’ college readiness, college access, and postsecondary graduation rates (Adelman, 2007; Conley, 2008).

For students who *are* able to graduate from high school, numerous barriers hamper entry into postsecondary institutions. Among them are inadequate curricula and assessment articulation between the K-12 and postsecondary systems; high school students’ lack of a clear understanding of the college matriculation process; and schools not offering suitable academic preparation to allow students to score well on college placement exams (Adelman, 2006; Conley, 2008; Venezia, 2008).

In addition, the K-12 and postsecondary sectors have characteristically operated independently of one another. States have only recently begun the process of using data on high school performance to make connections with student achievement in college. Separate funding structures and unlinked longitudinal data systems – in the rare cases where such systems actually exist – continue to impede postsecondary access and success (Venezia, 2008). For many economically disadvantaged students and students of color, academic trajectories may be further undermined by the fact that the cultural environments of postsecondary institutions are often incompatible with their socio-cultural experiences, making acclimation to college a difficult proposition for students from underrepresented populations (Rendon 1994; Hurtado, Milem, Clayton-Pederson and Allen, 1998).

For minority subpopulations in particular, staying on a path to graduation from a secondary institution is a particularly daunting task. High dropout rates in the poorest urban school districts suggest that many inner-city youth (typically students of color) will struggle to earn a high school diploma – the credential most commonly considered necessary for gainful employment and the minimum requirement for admission to four-year universities. Among urban students who graduate high school, low-income and first-generation college students are the most likely to face obstacles while trying to earn a college degree (Cook & Cordova, 2007). The problems are especially pronounced for Latino(a)/Hispanic and African-American students, whose college completion rates are significantly lower than their Asian and White peers (Adelman, 2006; Symonds, Schwartz, & Ferguson, 2011).

From a standard of living perspective, the prospects for persistent economic inequity due to uneven educational attainment are troubling. Despite a steady rise in the number of Latina(o)/Hispanic and African American students attending and graduating from college (NCES a. & b., 2004), more recent statistics on college completion underscore the disparity. US Census Bureau records indicate that as of 2014, less than 23 percent of African Americans 25 years and older held a bachelor's degree or advanced higher education credential. For Latina(o)/Hispanics, the proportion was even smaller – 15.2 percent. By contrast, nearly a third of the white population 25 and over had earned a degree from a four-year college or university by 2014 (US Census Bureau, 2014).

The shortage of college ready students able to persist to graduation suggests that filling future job rolls (and roles) with candidates considered by employers to be qualified may soon become more difficult. In turn, the opportunities for future workers to earn living wages will diminish. The news on the education front is not entirely bleak, however. While college access remains limited for many students, schools are making measurable (albeit small) gains in this area, as the proportion of high school graduates who immediately attend college is increasing (Cook & Cordova, 2007; Adelman, 2007).

It is within this context that we come to examine policy-level efforts in the U.S. that promote foundational college readiness during students' high school years. Are these policies likely to drive positive student outcomes? Will their stated intentions resonate with students in a way that encourages high educational aspirations, increases college readiness, or subsequent college attendance and completion? To address these questions, I examined students' perceptions of a policy designed specifically with these goals in mind.

A State Policy Approach to College Readiness: Arizona Move On When Ready

In 2010, through a statute referred to as Move On When Ready (MOWR), the Arizona Legislature established an alternate credential to the state's traditional high school diploma known as the Grand Canyon High School Diploma (Arizona Revised Statutes ARS-15-792.02). This new credential was designed explicitly to certify that a student who earns the diploma has demonstrated the academic acumen required to succeed in college and career. The credential represents a departure from the traditional diploma, which is primarily based on the number of credits students earn during high school (measured in time-based modules known as Carnegie units).

The Policy Intent of Move On When Ready. The Move On When Ready policy's stated goals include the outcome of *every* Arizona student being prepared to succeed in college or a technical training program that allows them to earn a living wage. Using MOWR's curricular design and testing schemes, Arizona policy makers hoped to improve academic outcomes and increase the number of students likely to enter and complete college. These goals are predicated on three basic propositions:

1. Students should be educated to commonly benchmarked standards that reflect college readiness;
2. Students should be able to choose from multiple paths of study once they demonstrate they have met the college readiness standards, and;
3. Students should not be tied to time on task requirements alone. Instead, they should be allowed to demonstrate college level proficiency at their own pace.

The MOWR strategy aims to ensure that students will not need additional academic supports (i.e., remedial coursework) to be successful in college-level classes. In

theory, the initiative attempts to address what social critic Malcolm Gladwell (2007) refers to as a “mismatch problem,” or the gap between the level of preparation for a task and the expectation of performance in that task. Relative to the transition from secondary to higher education, the MOWR policy attempts to eliminate the mismatch between high school academic preparation and college academic expectations; the assumption being that once a student has demonstrated the ability to perform college level work in high school, he or she will be well-matched to the academic demands of college.

The Grand Canyon High School Diploma. The traditional requirement for a student to earn an Arizona high school diploma is functionally equivalent to that student earning passing grades in four years’ worth of high school courses (23 Carnegie unit course credits). Until 2014, the state also required students to earn passing marks on Arizona’s Instrument to Measure Standards (AIMS), which indicate 10th grade level proficiency in math and English.¹

As an alternative, the new Grand Canyon High School Diploma (GCD) was introduced as a performance-based qualification. This credential was intended to signify a student has demonstrated the skills and knowledge needed to succeed in credit-bearing courses that can be used toward a postsecondary degree or technical/professional trade certificate (emphasizing that success should come without the need for remediation or non-credit earning, developmental coursework). To earn a GCD, students must

¹ In March 2013, the Arizona Legislature enacted a law that eliminated the stipulation that students must meet a minimum score threshold on AIMS math and English assessments in order to graduate from high school, beginning with the cohort of students entering ninth grade in 2013. On February 20, 2015, a new law was passed releasing all high school students who had been previously grandfathered by the 2013 statute from the AIMS requirement. The law was passed and signed with an “emergency” rider clause, making it effective immediately upon the Governor’s signature.

demonstrate college-level proficiency by successfully completing and passing a set of core courses *and* earning qualifying scores on a series of end-of-course examinations aligned to the curriculum of those courses. In Arizona statute, these aligned instructional systems are referred to as “board examination systems” (ARS-15-792.02).

Move On When Ready was enacted under the premise that students should be required to demonstrate proficiency in English Language Arts and mathematics *plus* a set of additional courses. In addition to math and English, the statute demands that students also demonstrate mastery of academic content and skills in two history courses, two physical sciences, and a fine arts course (again, by not only passing those courses, but by meeting college readiness standard on rigorous examinations aligned to them).

The rationale for this multi-course design feature was two-fold. The first was to ease any potential concerns that a performance-based high school diploma available to students at the end of only two years of secondary education would be appropriately rigorous (i.e., with the bar for attainment set at an empirically determined level). The second was a function of the fact that the credential was intended to establish unequivocally that a student earning the diploma had demonstrated the scholarly acumen needed to earn passing grades in *any* first credit-bearing courses in an open-enrollment (community) college.

Instructional System Providers. In 2010, Arizona was one of four states working with a non-profit policy center based in Washington DC, the National Center on Education and the Economy (NCEE), to develop a performance-based diploma option. In addition to Arizona, NCEE had also partnered with schools and education agencies in

Connecticut, Kentucky, and Mississippi to advance the model on which MOWR was principally based. Nationally, NCEE branded the initiative *Excellence for All*.

In essence, NCEE was responsible for the MOWR policy's original conception. The organization was also the major contributor to the draft language of the Move On When Ready bill, which required curricula and paired end-of-course examinations (board examination systems) for Move on When Ready to be procured through a competitive bid process conducted by "an interstate compact on board examination systems" with technical assistance from "a national organization that is devoted to issues concerning education and the economy" (ARS-15-792.02). Not coincidentally, NCEE was tapped by the State Board of Education to recommend the board examinations system providers for MOWR.

With NCEE's guidance, the Kentucky Department of Education (KDE) led the interstate compact by eliciting applications from vendors that could provide the foundational structure for NCEE's performance-based diploma concept. The multi-state procurement process opened with KDE's request for proposals. A panel constituted of representatives from the various states (including Arizona) vetted proposals to determine compatibility with the qualification system model (NCEE, 2012). This initial procurement process concluded with the identification of two well-known instructional curriculum and assessment regimes: ACT QualityCore based in Ames, Iowa and the International General Certificate of Secondary Education (IGCSE) program from Cambridge International Examinations in Cambridge, England.

To formally endorse the board examination systems, NCEE convened a Technical Advisory Committee (TAC) comprised of ten education experts. The TAC included

professionals and education researchers in the fields of psychometrics, cognitive science, mathematics, and English Language Arts.² The TAC’s first task was to ensure the board examination systems mated rigorous syllabi and curricula with customized professional training, ample instructional resources and materials, and externally scored and assessments that lined up with the content and skills covered in the curricula. The board exam systems were also examined to ensure that they aligned with “internationally benchmarked standards” as required by the MOWR legislation. Finally, criteria for certifying the board exam systems included a requirement that they provide data reporting tools with which schools could monitor student progress toward college and career readiness standards (NCEE, 2012).

In 2011, based largely on the TAC’s recommendations, the Arizona State Board of Education approved Cambridge IGCSE and ACT QualityCore as board examination systems certified for use in MOWR.

Summative Assessments of College Readiness. The group of examinations to determine qualification for the Grand Canyon Diploma is administered as a series of summative assessments of student learning in the subject areas of math, English, science (biology and chemistry or a two-year coordinated sciences course), and social studies. Cambridge IGCSE exams are comprised of the sum of several parts, or “components.” Components of an exam consist of timed paper exam sessions (usually two, lasting between one and three hours apiece) and a component known as Coursework, which is

² Members of the TAC: Howard Everson (co-chair), City University of New York; James Pellegrino (co-chair), University of Illinois at Chicago; Lloyd Bond, Carnegie Foundation for the Advancement of Teaching; Philip Daro, Americas Choice; Richard Durán, University of California, Santa Barbara; Edward Haertel, Stanford University; Joan Herman, UCLA; Robert Linn, University of Colorado; Catherine Snow, Harvard University; and Dylan Wiliam, University of London.

required for several of the courses. Coursework refers to pieces of individual student work. They are approximately akin to a set of open book exams or lab reports completed by the student without aid from the teacher or other students. Coursework papers are administered and graded by the course's teacher of record, then submitted to Cambridge International Examinations for external verification (or moderation) of the grade the teacher submitted. The total number of available points, or "marks," a student earns on the combined components of the exam determines her or his final grade on the exam.

ACT QualityCore summative examinations are more similar to American standardized tests, consisting of one-time, single-administration subject exams comprised of multiple choice and constructed response elements. Like the Cambridge IGCSE timed test papers, ACT QualityCore exams are sent to the provider for independent scoring and validation.

Qualification Scores. Once the Arizona State Board of Education had established the qualification system providers, NCEE's Technical Advisory Committee was tasked with the secondary yet equally significant responsibility of setting the college readiness benchmarks for ACT QualityCore and Cambridge IGCSE exams (known as qualification scores). To this end, the TAC first developed a process to determine the appropriate college-readiness qualification scores for the course-aligned examinations for MOWR in English and mathematics. Scores in the other subject areas would be set by locally convened subject area task forces, which would then report score recommendations to the State Board of Education for adoption. The TACs primary goal was to set minimum scores certifying that students graduating from high school with a performance based diploma had met minimum criteria and provide assurances that students would be ready

to succeed in the first credit-bearing courses at the community college level without the need for remediation in those subjects. (NCEE, 2012)

A directive to identify benchmarks based on compelling data and research guided the process of setting qualification scores (NCEE, 2012). The methodology the TAC adopted for qualification score setting is best described in the following excerpt from NCEE's (2012) technical white paper on English and math qualification score setting:

As the TAC approached its work it understood that its central task was to address the fact that during the first few years of Excellence for All [MOWR] there would be no data on how the students in the pilot schools performed in college (since none of these students will have entered college), so proxy measures that link student performance on the QualityCore and IGCSE exams with college grades or other predictors of college success, such as the ACT and SAT exams, would have to be identified and analyzed. The TAC set out to do so and found or developed the following resources:

- ACT Validation Data - These are records on more than 20,000 students who have taken either the QualityCore English 10, Algebra I or Geometry exam in the past several years and then subsequently took the PLAN or ACT college readiness tests or both.
- Cambridge IGCSE/PSAT Study - International students who had just completed their sophomore year of high school took the winter version of the fall 2011 PSAT earlier this year. All 342 of these students had previously taken the IGCSE Mathematics, First Language English and English Literature examinations.
- Community College Study - Over 1,000 first year community college students from eight colleges in four states, including two in Arizona, took one of the three QualityCore exams noted above or the IGCSE Mathematics or First Language English exam earlier this year. Their fall 2011 first semester grades and other data were then linked to their exam scores.

The TAC then analyzed these data sets and joined them with other relevant analyses to reach decisions on the qualification scores for the three ACT QualityCore and three Cambridge IGCSE exams that will signify which students meet the English and mathematics criteria to qualify for a proficiency-based diploma.

The TAC's view of college-success for the purposes of this work was defined as the student performance level that indicated a student had a 67% chance of earning a first semester GPA of B- (2.75) or better in community college. This was influenced

by both the College Board and ACT definitions for their college readiness benchmarks. The College Board benchmark is set where students have a 65% chance of earning a first year GPA ≥ 2.7 and the ACT benchmark is set where students have a 50% chance of earning a GPA of B or better and a 75% chance of earning a C or better. (NCEE, 2012)

NCEE also issued a series of white papers describing the processes used to establish qualification scores in subjects other than math and English.

Armed with the TAC's recommendations for score-based indicators of college readiness and supporting technical guidance from NCEE, the Arizona State Board of Education adopted qualification scores for the Cambridge IGCSE and ACT QualityCore course-aligned exams in spring 2012.

Assessment Validity and Move On When Ready. As the process for score setting indicates, the Technical Advisory Committee went to great lengths to produce valid assessment criteria for college readiness. Nonetheless, the fact that the college-readiness determination in Move On When Ready is tied to a series of examinations brings into question the inherent fairness of such a design. This is especially salient for education policy makers in light of widely cited research asserting that performance benchmarks and scoring metrics of standardized tests are invalid measures of student ability (Amrein & Berliner, 2003; Deil-Amen & Tevis, 2010). That is to say, inferences about student ability that rely on test performance alone are problematic because they are poor predictors of students' future achievement (see, e.g., Nichols, Glass & Berliner, 2005; Nichols & Berliner 2006; Nichols & Berliner, 2008; Maruyama, 2012).

As an alternative, Maruyama (2012) suggests college readiness should be evaluated on the basis of multiple assessments (both academic and non-academic),

including “variables such as intellectual skills, motivation, background, and other ‘noncognitive’ and ‘soft’ skills” (p. 258).

Further complicating the issue is the argument from education policy critics, who assert the testing regimes by which policy makers evaluate individual and aggregated measures of student success (and increasingly, teacher and school performance) are inherently biased and too often reflect inequities in educational resources along race and socio-economic class lines (Kozol, 2005). Consequently, there exists a real risk that *any* system that relies heavily on test data will prove onerous for historically vulnerable populations such as minority and economically disadvantaged students (Deil-Amen & Tevis, 2010).

While the assessments used in MOWR are 1) designed to be more skills-based than typical standardized test regimes used in the United States; 2) are taken as a series rather than as a single indicator of readiness; 3) are comprised of multiple testing components (in the case of Cambridge IGCSE); and 4) contain more long-form questions (i.e., essay and constructed response) than the tests examined by the scholars cited above, the potential for error through invalid inference remains high. Particular caution in the case of MOWR is warranted considering the initiative’s explicit focus on college readiness – an educational outcome that historically has been largely exclusive to the domains of more privileged students.

Grand Canyon Diploma Eligibility. Under the Move On When Ready plan, students are eligible to receive the Grand Canyon Diploma when they have met the qualification scores on the course aligned exams in all required subject areas and have passed locally offered economics and government courses. By design, students in

MOWR participating schools may take all of the required core courses, sit for associated end-of-course exams, and earn the GCD as early as the end of grade ten. However, the initiative was designed to treat time as a variable. For example, a student entering high school in any given cohort may be eligible to earn a GCD at a different point in time than his or her classmates. Some students might meet the GCD requirements as early as the end of their tenth grade year, while others might do so in the 11th or 12th grades.

Students who qualify for a Grand Canyon Diploma are afforded the opportunity to ‘move on’ by enrolling full-time in community college. Alternately, they may choose to take their diplomas and enter the workforce. Students also have the option to remain in high school through the end of grade 12, perhaps enrolled in an advanced diploma pathway in preparation for selective four-year university. Additionally, they may stay in high school to continue in a credit-based course progression or enter into a Career and Technical Education (CTE) program of study.

Setting aside a fixed schedule of time-based courses that would normally dictate the rate at which students demonstrate proficiency is the feature of the qualification model that is particularly novel. In traditional models, students are promoted to the next courses in their educational sequence based on whether they have ‘passed’ prerequisite courses based on their in-class performance. Typically, each course is delivered in one academic year with each year representing one credit. The accumulation of credits triggers the awarding of a diploma. The qualifications model, when implemented with fidelity, calls for students to progress to the next course in a subject area only after they have met qualification on the prerequisite course-aligned exam. It is possible that a student might take longer than a year to be ready to meet the qualification, or in some

exceptional cases, a student might be prepared to meet qualification sooner. ACT QualityCore and Cambridge IGCSE exams are administered in the fall and spring of each year hypothetically allowing a student to test before a full academic year has transpired. By design, if a student does not reach the qualification score on the first attempt, he or she is expected to re-sit for the exam at the next appropriate test administration (i.e., when the student is adequately prepared to qualify).

Conversely, a student might never meet the proficiency requirements for the GCD. For this student, one option would be to fulfill the credit-based requirements of a traditional high school diploma. In the event that student does not earn the required credits, he or she would be counted among the approximately 22 percent of all Arizona high school students who currently finish four years of high school without a diploma of *any* type (Arizona Department of Education, 2012). However, in 2013, the Arizona State Board of Education adopted rules that afford students the opportunity to receive a diploma after four years of high school instruction in the event they are unable to meet the credit-based requirement or the qualification scores needed for the GCD. MOWR's policy framers originally envisioned this option (referred to as the *Standard Diploma*) as a way to encourage students who were not successful in meeting the qualification scores on their first attempts to continue working within the structure of the qualification system rather than default to the credit-based pathway.

This Standard Diploma option is available to a student under the following conditions:

1. The student continues to work within her or his school's MOWR approved instructional system in each required course until the student has met the qualification score or timed out of high school
2. The student must sit for the course-aligned assessment in each required subject at least once. In mathematics and English Language Arts, the student must take the exam at least twice before the end of four years.
3. Instruction must provide coverage of all of Arizona's *College and Career Ready Standards* (the state's term for the recently developed Common Core State Standards) as required by state law.

Advanced Diploma Options In Move On When Ready. The instructional systems adopted for Arizona's new performance-based diploma model consist of a raft of courses and exams students would typically take in their *first two years* of high school. The Kentucky led competition to identify instructional providers also featured a request for proposals from more advanced programs of instruction that could be offered in high school at the level immediately beyond the foundational college readiness certification. These included Cambridge International Examination's *AICE Diploma* program, an extended version of the ACT QualityCore program for 11th and 12th grade, the College Board's *Advanced Placement International Diploma*, and the *International Baccalaureate Diploma* program. These programs are typically deployed in the final two years of high school in order to prepare students for success at selective four-year colleges and universities. Promotion to these advanced high school programs was one of the multiple academic trajectories the policy framers laid out for students who had already qualified for the performance-based diploma (NCEE, 2012).

Management of Move On When Ready. Under the statute that established Move On When Ready, the initiative is to be managed through a no-fee contract issued to a private organization chosen at the discretion of the by the Arizona State Board of Education (SBE). This private organization, selected by a vote of the SBE's 11 members, is responsible for working with the board, the Arizona Department of Education (ADE), and participating schools to coordinate the implementation and administration of the initiative. The initial five-year contract to manage MOWR was granted in 2010 to an Arizona based non-profit policy center, the Center for the Future of Arizona (CFA). CFA had worked closely with NCEE and legislators on contextualizing the policy for Arizona and offered tweaks to the legislative language of the MOWR bill as it made its way through the ratification process. CFA also led state-level efforts to bring awareness of NCEE's qualification system concept to members of the Arizona education and policy communities.

In addition to its management role, CFA has also been tasked with identifying technical issues surrounding the operationalization of MOWR and clearing hurdles (both financial and mechanical) that might otherwise prevent schools and students from engaging with the policy. For example, CFA developed the design of the Standard Diploma option and promoted its approval to the State Board. Enacting a communications strategy, developing media and community relations materials, and general advocacy for MOWR are also duties that fall to CFA staff members working on

the initiative. As of March 2015, that staff consists of four full time employees and one Graduate Research Assistant from Arizona State University.³

Local Education Agencies. Local education agencies (LEAs) such as public districts and charter management organizations are central to the Move On When Ready initiative. The Move On When Ready policy's framers have relied on partnerships with LEAs and their schools to implement the instructional systems and testing regimes of a performance-based qualification system. To codify these partnerships, CFA and NCEE entered into formal memos of understanding with districts and schools, emphasizing the need for schools to not only adopt the instructional and assessment schemes outlined by MOWR, but to implement academic interventions to support those students who might enter high school with significant gaps in knowledge and skills that could jeopardize their chances for success in a rigorous, college preparatory curriculum. These agreements also established that schools would develop diagnostic assessments of student academic performance prior to entering grade nine. In the event students arrive at high school with significant gaps, they would be offered targeted academic supports to enable them to close the gap with other students pursuing the Grand Canyon Diploma at the school. Conditions were also established compelling schools to provide ongoing support to students struggling in their courses while already enrolled in the curriculum. Lastly, the agreements stipulated that students who do not meet the qualification score on course-aligned exams used to determine eligibility for the Grand Canyon Diploma would be

³ I have been professionally employed by both NCEE and CFA in the role of Education Innovation Research Fellow since 2012. This job function is discussed at greater length in Chapter 3 of this study (under the heading titled Proximity of the Researcher to the Research Topic). From 2010 to 2012, I fulfilled the Graduate Research Assistant role for CFA while enrolled in graduate-level courses.

given the opportunity to receive personalized academic interventions and re-test as often as needed and practical. However, the memos lacked any specific prescription for how these supports should be delivered or in what manner or amount. Additionally, there is no language within the agreements to address consequences or enact remedies for non-compliance.

Application of the Move On When Ready Model. Across Arizona, schools that have volunteered to participate in the Move On When Ready initiative have done so in varying degrees (Burke, 2012). In general, schools have chosen to implement features of the MOWR design depending on capacity, philosophy, or level of engagement. For example, several of the schools deploying the MOWR strategy have elected to offer aligned curriculum and testing schemes universally in an attempt to provide all students the same college preparatory experience regardless of any previous ability grouping the students may have encountered before entering high school. Other schools have not adopted this ‘whole school’ model, choosing instead to reserve the curricula and GCD option for only a select portion of their student bodies. This ‘school within a school’ application is sometimes referred to as the ‘cohort’ model.

Early evaluations of implementation, both formal and informal, suggest that none of the MOWR schools have faithfully implemented the model. That is, none have committed entirely to privileging the qualification system over the model that awards Carnegie unit credits toward graduation. However, in fairness to the schools, there is no stipulation in the policy language or statute to suggest schools must apply an ‘all or none’ approach or any rule that prevents them from implementing parts of the model in lieu of the whole. From my experience in more than four years of working closely with MOWR

schools, I can attest that a full implementation of the qualification system model would require a school to undertake unprecedented shifts in operational structure, staffing, scheduling, communication, culture, and most importantly, mindset.

The College Readiness Binary

With its use of Arizona State Board of Education certified curricular designs and testing schemes, Move On When Ready is a structurally oriented, qualification system that attempts to attain a relatively narrow goal: increase the number of students able to successfully perform at a college-level academic standard. By relying on a set of benchmarked assessments to measure success and failure, MOWR propagates a categorical binary not typically found in contemporary American educational practice. It is uncommon because it establishes a set of explicit performance criteria on a set of examinations needed to earn a high school qualification that certifies them prepared for college level work. Moreover, students enrolled in MOWR either *do or do not* reach performance objectives to earn a credential that, by its design, seeks to establish their college readiness. This is quite different than a traditional Arizona high school diploma, which a student earns by being compliant to a basic set of time-based courses. In essence, a traditional diploma tells little about its bearer beyond the fact that he or she attended a particular high school and completed the required course sequence. Under that scenario, it is the issuing school's reputation and external perceptions of the courses the student took that imbues the diploma with its intrinsic value. The GCD, on the other hand, subsumes an unambiguous either/or proposition, using an assessment-based standard as its primary metric for awarding high school credentials.

Research problem: Student Perceptions of the College Readiness Binary

It is reasonable to assert that the attitudes and beliefs a student develops about his or her ability to be college-ready will likely have measurable effect on his or her educational and career outlook (Byrd & MacDonald, 2005). Therefore, in order to establish the impact of a policy intended to improve students' academic prospects and economic outcomes, it follows that we ought to develop a solid understanding of the perceptions they develop around the policy's particular construct. This requires recording and analyzing students' stated beliefs about the policy and its effect on their attitudes, understanding, and behaviors.

For the researcher attempting to make sense of personal experiences and accounts, Marshall and Rossman (1999) advise,

One cannot understand human actions without understanding the meaning that participants attribute to those actions—their thoughts, feelings, beliefs, values, and assumptive worlds; the researcher, therefore, needs to understand the deeper perspectives captured through face-to-face interaction. (p. 57)

To determine the influence Move On When Ready has on students, we need to explore the perceptions, factual understanding, attitudes, and actions of students as they engage with it. In light of the stated goals of the policy, it is especially worthwhile to focus on students from historically vulnerable minority populations as they represent the groups of students who are statistically least likely to be college-ready at the end of four years of high school. They also represent the category of students likely to benefit most from the MOWR initiative should it prove successful.

Significance of this Study

To date, research has added little clarity to our understanding of how high school students (from any sub-group), by their individual relationships with school, family, peers, culture, etc., develop understanding of college readiness standards and the methods for measuring them. More to the point, no formal inquiry has been conducted on student perceptions relative to this particular policy. Also, considering the various contexts through which students experience high school, we currently have limited insight into how students approach multiple time/pathway combinations when these pathways are made available. Not only is it unclear how students perceive their options and prospects within Move On When Ready, at this point we have little indication whatsoever of what they *know* about the initiative. The gap in the research on students' thoughts, feelings, beliefs, values, and assumptive worlds relative to the college readiness binary is conspicuous. A study that answers questions of how students sort themselves within the context of the particular binary posed by MOWR will hopefully fill that void.

This study was also designed to compare students from two individual school sites, each with distinctly different student populations relative to size, socio-economic, and ethnic profiles. It examined how different school contexts affect different students. This includes examination of how the two schools have implemented MOWR, the attitudes and practices of their faculty and staff, the general composition of their student populations, and their locations and facilities. The inclusion of this feature in the study's design was based on the basic supposition that school context matters in education policy research. That is (as discussed in the review of the literature that follows this chapter), it

is probable that characteristics of the spaces in which students are educated have salient implications for the figured-world identities students create for themselves and their prospects for achieving positive educational outcomes.

Research Questions

This study recorded and analyzed multiple face-to-face interactions with students to better understand how they think and act within the context of Move On When Ready. It did so with particular attention paid to students from historically vulnerable minority subgroups (e.g., the Latina (a)/Hispanic sub-population) who are currently enrolled in schools deploying the MOWR strategy. Through analysis of personal interviews and observations, the study also compared the views of students from these ethnic groups to their White peers from more privileged circumstances.

This inquiry was guided by the following questions:

1. For a student exposed to Move On When Ready, what is her or his perception of the likelihood that he or she will meet the initiative's explicit goal of college readiness and how does a student conceptualize the academic pathways available to him or her in high school?
2. How does knowledge of Move On When Ready (or lack of it) affect a student's ability to recognize the policy's impact on her/his education?
3. How do a student's support networks (e.g., family/peers outside of school and teachers/counselors/peers during school time) affect his or her understanding of educational success as defined within the context of Move On When Ready?

4. Based on the comparative analysis of the perception of students from two distinct academic and social environments, what identifiable commonalities and dissimilarities emerge?

Research Methodology

Faithfully recording how individual students made meaning of the college readiness binary baked into Move On When Ready, I was exploring the behaviors and outcomes the policy encourages – both intended and unforeseen. Ideally, this compendium of student voices will help MOWR implementers refine future application of the policy and better serve individual student needs. In addition to its unknown effect on academic proficiency and college going rates, the policy framework of MOWR leaves several other questions unanswered regarding ways in which student perceptions affect its application.

As Marshall and Rossman (1999) suggest, answering my research questions would require collection of data relative to the personal accounts of students engaged in MOWR. This meant employing a methodology capable of recording not only what individuals think and believe about their experiences with the initiative, but how they interpret and mediate them as well. Collecting, analyzing and reporting this type of information, focused on perceptions and conceptualizations, was best suited for a qualitative research approach. According to Creswell (2009), qualitative research provides the “means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (p. 40), and while I do not perceive MOWR to be a “problem” *per se*, this reference to personal ascription points to the particular usefulness of the methodology for my research purpose.

A Note on the Concept of School ‘Reform’

At this juncture, I'd like to alert the reader to the rationale behind my use of the terms improvement, modification, transformation, or change when referring to educational policy and practice (in lieu of the more commonly used 'reform'). Simply stated, I maintain that the use of the term reform is often misapplied when referring to schooling and education policy. While reform and improvement are synonymous as nouns, the infinitive 'to reform' denotes correction of a deficiency or defect. The premise that educational reform efforts are capable of correcting systemic flaws within American schools and that the extant structures of American schooling are inherently inadequate is one about which there is considerable debate (Berliner & Biddle, 1995). For example, it has been effectively argued that the performance of students is often more attributable to socioeconomic condition and a multitude of external (confounding) factors than to any discernible in-school influences (Berliner, 2006). In addition, to accept that *schools need to be reformed* concedes the argument that schools and teachers are primarily to blame for undesirable student outcomes. While I am unwilling to make such a broad concession, I acknowledge the room that exists for improved educational practices.

CHAPTER 2

REVIEW OF THE LITERATURE

Considered in the context of Arizona Move On When Ready, this chapter offers a review of research literature related to American high school students' perspectives, behaviors and attitudes relative to college, paying particular attention to the college readiness prospects of underrepresented students of color. Most of the literature devoted to student perceptions of the transition from high school to postsecondary institutions is retrospectively focused on the mechanics of college access and school/community contexts rather than students' self-conceptions of their holistic readiness or intellectual abilities while in high school. As a result, this review is limited to research that is somewhat peripheral to the core of this study, which focuses on first year high school students. Ultimately, however, the gap underscores the potential significance of a study focused specifically on this younger group of students.

I begin by providing additional background for this study, including definitions of college readiness and college-going culture in schools and by highlighting ways in which these concepts can be considered in the context of MOWR. With the purpose of demonstrating how the literature integrates with my research, I then offer annotated summaries of empirical studies that investigate influences on students' understanding of the college preparation process and college access.

Defining College Readiness

Institutional Definitions. In the context of federal- and state-level education policy, the term "College and Career Readiness" draws its definition principally from the 2010 federal Elementary and Secondary Education Act's line item titled "College and

Career-Ready Students.” This legislation, by which recent federal “Race to the Top” grant competitions were authorized, was drafted in part to spur K-12 schools to produce students with the skills and knowledge colleges and employers expect them to possess upon graduation from high school. The legislation’s definition of college and career readiness, which undergirded the development of the Common Core Standards, was significantly influenced by Conley’s (2008) nuanced characterization of college readiness, which he defines as “the level of preparation a student needs in order to enroll and succeed, without remediation, in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program” (p. 4). His definition asserts that a successful student will have “completed entry-level courses at a level of understanding and proficiency that makes it possible for the student to consider taking the next course in the sequence or the next level of course in the subject area” (p. 4).

Extended Definitions. Interpreting data on college attendance and completion, Conley (2008) took the definition further by proposing a comprehensive framework for college readiness built on four critical areas of student development: a) key cognitive strategies, b) key content knowledge, c) academic behaviors, and d) contextual skills and knowledge. He contends that student persistence to college graduation is due in large part to the student’s acquisition of “college knowledge” – an understanding of the academic skills *and* behavioral expectations of the college environment. His research found that a majority of students who would be considered college ready using the conventional standard for assessing college readiness (e.g., receiving passing grades in a set of core high school courses and achieving the minimum scores required for graduation on state-

level high stakes tests or achieving a benchmark score on a standardized assessment) failed to meet his expanded notion of readiness.⁴ Conley's work supports the argument that college readiness requires a holistic approach to student development and must emphasize more than academic content knowledge. It also highlights a potential defect in the structure of Move On When Ready due to its narrow focus on academic performance.

In their study of the effects of school size on college readiness in urban Chicago schools, Holland and Farmer-Hinton (2009) took Conley's definition further, imputing a likely connection between institutional goals (e.g., matriculation to college by all students) and the environments in which those goals are articulated. Through this study, the authors developed a definition of "college culture," or the socio-cultural conditions that promote "college knowledge," to bracket their work, building a conceptual framework on theories of social capital (Bourdieu, 1986) and practices based on ethics of knowledge and care (see, e.g., Noddings, 1988). Drawing connections to their own prior empirical research on the topic of college-going, Holland and Farmer-Hinton (2009) assert,

College culture reflects environments that are accessible to all students and saturated with ever-present information and resources and ongoing formal and informal conversations that help students to understand the various facets of preparing for, enrolling in, and graduating from postsecondary academic

⁴ The educational testing firm ACT, for example, has developed its own college readiness standard based solely on ACT standardized test scores that college admissions units often use to evaluate applicants. These tests are designed to measure a student's academic acumen but give no consideration of the "soft skills" highlighted by Conley, Maruyama, and others.

institutions as those experiences specifically pertain to the students' current and future lives. (p. 26)

The authors suggest that institutional conditions and culture either aid or detract from a student's ability to develop positive attitudes and behaviors to support his or her preparation for college.

Models Intended to Improve Student Persistence and Performance

Educators have developed a number of high school improvement strategies to promote positive academic outcomes and increase college readiness for all students (Darling-Hammond, 2006). To produce positive effects on student performance and academic behaviors, some, like Darling-Hammond (2006), suggest an overarching framework of changes to schooling that center on staffing schools with well-qualified teachers supported by ongoing professional development and peer collaboration. She recommends creating instructional environments in high schools that allow teachers working in teams to increase personalization for students and the development of "advisories" in which small groups of students meet with the same teacher during the academic year (Darling-Hammond, 2006). These teaching practices are best deployed in schools that use curricula based on rigorous academic standards, organized around performance-based assessments, and bolstered by scaffolds of academic supports and interventions for struggling students (Darling-Hammond 2006; Friedlander et al, 2007). Adelman (1999) finds the level of rigor a student encounters in high school courses to be especially important for college readiness. His widely cited research asserts the level of rigor and instructional quality students receive in high school are more accurate

predictors of postsecondary success than either test scores or class rank, particularly for African American and Latino(a)/Hispanic students (Adelman, 1999).

Detracking. Some efforts to raise college-going rates are based on strategies of ‘detracking’ (or ‘untracking’). Detracking models depart from a long-practiced pedagogy of grouping students by ability (as determined by test scores or other grade-level performance data). Instead, they rely on the delivery of instruction in blended ability classrooms, where students study a common curriculum, regardless of their individual proficiency levels (Oakes & Saunders, 2008). Rather than limiting the delivery of academically challenging content to those students perceived to be on target to enroll in postsecondary institutions, these efforts have seized on instructional models that focus curricular rigor on all students (Burris, Wiley, Welner & Murphy, 2008). Schools adopting this approach typically provide a college preparatory curriculum to students regardless of their anticipated academic trajectory in tandem with comprehensive academic supports intended to help struggling students (Alvarez & Mehan, 2006; Oakes, 1998; Welner, 2005). These detracking models are designed as multi-faceted strategies to enhance students’ proficiencies and student aspirations as well (Alvarez & Mehan, 2006). The practice is also intended to insulate against what Rist (1970) famously concluded when he observed that teachers tend to cluster students based on perceptions of their social class rather than grouping them based on academic diagnostics – thus, resulting in imprecise academic sorting within a classroom.

Detracked schools typically supplement instruction with a range of academic and social supports including longer school days and yearly academic calendars, out-of-school time interventions, tutoring, guidance counseling, peer mentoring, and community

and parental participation (Alvarez & Mehan, 2006; Burris, Wiley, Welner & Murphy, 2008). Schools such as the Green Dot public Schools, KIPP and BASIS charter schools, the Preuss School at University of California San Diego, and others have replaced low level ('tracked') courses with alternative interventions that favor temporary ability grouping paired with targeted scaffolding of instruction in order to address students' learning and performance gaps (Alvarez, 2006; Tedford, 2008).

The success of detracked learning environments is attributed, in part, to the ability of schools to adopt cultures of rigor that encourage learning and positively affects student motivation (Alvarez, 2006; Alvarez & Mehan, 2006). The Preuss School in particular has been presented as an emblematic model of a successfully implemented detracked curriculum, typically achieving college-going rates above 75 percent (Alvarez, 2006). These results, however, cannot always be taken at face value. Critics argue that high college-going rates and test performance at schools like Preuss, KIPP, and BASIS are often the result of 'skimming' or 'creaming' student populations, whereby schools essentially recruit and nurture high performing students while discouraging less motivated and less talented students from enrolling or remaining enrolled through graduation (Lacireno-Paquet, Holyoke, Moser, & Henig, 2002). Moreover, these schools are typically small, lacking many of the characteristics of large, comprehensive urban high schools.

Structural Models. Intentionally designed smaller high schools and the reorganization of large, comprehensive high schools into smaller learning communities are yet more examples of structural changes to push college readiness. Similarly, commercially branded school improvement products aimed at increasing college

enrollment (primarily at comprehensive urban high schools) include programs such as the *Accelerated Schools Project, America's Choice, and Success for All* (Desimone, 2002, Rowan, Correnti, Miller & Camburn, 2009). Efforts to produce greater numbers of college-going students through high school redesign have also resulted in the establishment of 'early college high schools,' first introduced in 2002, which are designed to offer a rigorous curriculum and the opportunity for students to earn transferable college credits while in high school (Cole, 2010; Kaniuka, 2010).

Assessment Models. The misalignment between high school curricula and graduation requirements is sometimes cited as a reason students fall short of college readiness standards (Adelman, 2006, Conley, 2007). Until 2009, no state had pegged its high school assessment system to college readiness benchmarks (Nagaoka, 2009). To correct this deficiency, skills-based testing schemes (aligned to college readiness standards) are currently in development by two separate state-led syndicates. The Partnership for Assessment of Readiness for College and Careers (PARCC) is a more than 20 state consortium (the number has fluctuated between 22 and 28 states) convened to develop a common assessment system, which would enable member states to annually report on students' progress toward the primary goal of college and career readiness. With a nearly identical objective, the Smarter Balanced Assessment Consortium was formed in January 2010 and now includes the participation of more than 30 states (some states are members of both consortia). The grounding for the consortium's research and evaluation protocols and philosophical framework draw significantly from the learning assessment work of the aforementioned Darling-Hammond, who advises the Smarter Balanced effort.

Both consortia are in the development phases of systems for formative and summative student assessment. The assessment objectives for both are organized around a college readiness criteria outlined in the recently established Common Core State Standards (CCSS). First released in June 2010, The CCSS were developed in partnership with the plurality of U.S. state departments of education as a framework to guide delivery of knowledge and academic skills students need “to succeed in entry-level, credit-bearing academic college courses and in workforce training programs upon high school graduation.” According to the development criteria for the standards, college refers to both two- and four-year postsecondary schools (i.e., community colleges and baccalaureate colleges/universities). If either or both groups developing these assessments are successful in the task of aligning their tests with college readiness standards, the result would be a significant improvement over existing state standardized or norm referenced tests, which are generally poor predictors of postsecondary success and do not often measure complex analytical skills (Lombardi, Seburn, & Conley, 2011).

Influences on College Readiness

The literature on college readiness also points to environmental, social, situational, and institutional conditions that both aid and hinder college-going behavior and attitudes. For example, lack of access to information about the process of applying and enrolling in college often hinders the pursuit of a postsecondary degree for first-generation college-goers, people of color, and those who are economically disadvantaged (Conley, 2008; Venezia, 2008). This information deficit may lead to indifference about the college preparation process and to wide variations in student aspiration levels (Venezia & Kirst, 2005).

Students' Factual Knowledge about College Going. A qualitative phenomenological study by Deil-Amen and Tevis (2010) underscores the challenges for students seeking to matriculate to college. This study examined the sense making process of low SES minority students as they approached (and subsequently reflected on) the process of college enrollment. Data collection consisted of three rounds of interviews with more than 100 Chicago public high school students, beginning in their senior year of high school and including interviews in their sophomore or junior year of college. The researchers also analyzed essay responses from the participants' grade 12 writing assignments. This study found that few students felt they possessed much knowledge about the college admissions process prior to their senior year of high school.

While a majority of the students (more than three quarters) began to recognize the importance of entrance exams in their senior year, many were unclear about the impact exam scores had on their college admission chances. Further, the students indicated they received little encouragement from families, the community, peers and teachers. They also noted low levels of expectation and guidance from school personnel, which also depressed college ambitions. Deil-Amen and Tevis' (2010) study also reveals

[a]n inflated sense of college readiness...particularly prevalent among those students who made [ACT] scores of 20 and 21 (equivalent to an SAT score of 950 to 990). Their perceptions were apparently influenced by the schools' tendency to focus students on aiming at the school average as the desirable score that would raise the school's ACT average. (p. 157)

In line with Gladwell (2007) and Conley (2009), Deil-Amen and Tevis's (2010) findings suggest that matching performance with expectations is vital if schools are to help students make sound decisions in preparation for college. To evaluate decision-making in the context of MOWR, three of the four research questions posed in this study touch on the issue of 'factual knowledge' versus expectations.

School Context and Culture. Examining the linkages between student outcomes and school context (including tracking/sorting policies, teacher quality, counseling, remediation and intervention), Kimura-Walsh, Yamamura, Griffin, & Allen's (2009) study of Latina urban high school students just narrowly predate the findings of Deil-Amen and Tevis (2010). These researchers argue that even when a school serves as the hub for information about college and postsecondary educational opportunities, under resourced and overcrowded environments are a major barrier to adequate dispensation and attainment of 'college knowledge.' In this particular case, only 10 percent of the student population – predominately high achieving students - received targeted assistance and counseling toward college enrollment. The remaining 90 percent was provided with relatively little guidance to develop postsecondary plans. Several students in the study indicated they needed to seek out of school, supplemental college preparatory resources. The study also found that family support and encouragement, though key, were alone insufficient to promote a college going culture among the Latina students sampled. The study indicates that systemic inequities and resource shortages likely discourage college-going behavior among these students.

Knight-Diop (2010) took a different approach to studying behaviors that promote college readiness by examining a school that had demonstrated a high level of success

preparing African American students for postsecondary enrollment. In line with Noddings (1988), she attributes the school's successful promotion of college going to its development of a pervasive 'ethic of care.' She notes:

The institutional structures encompass the written expression of institutional beliefs, actions, and attitudes within such documents and activities as the school's mission statement, initial student contracts, staffing procedures, college preparation materials, tests, courses, parent/family relationships, and extracurricular activities. Interpersonal caring relates to daily, shared experiences and interactions between and among students, staff, parents, and the surrounding community. Manifesting itself in the everyday enactment of norms of caring within a school, interpersonal caring involves the values, beliefs, attitudes, and actions of the program staff. Interpersonal caring between staff personnel and students may be expressed in activities as varied as scheduling discussion sessions by gender or corporate-sponsored involvement. (p. 160)

Over the course of her four-year ethnography, Knight-Diop (2010) observed that students gained access to rigorous curriculum, college preparatory instruction and high expectations of academic achievement. However, students' experiences were mediated by the institution's policies, which included tracking of students in certain academic paths. She recorded that students were quite aware of tracking policies and that these tracks had a noticeable effect on student aspirations and attitudes toward college (positive for academically advanced students and negative for those who weren't tabbed for a college preparatory curriculum). Moreover, by setting high expectations at the institutional level, some students benefitted from the institutional culture as well as from

peer relationships that supported college-going behaviors. In addition, while the school's college counseling staff was under resourced, the institution was able to partially compensate by creating spaces where student-directed activities fostered the college preparatory culture (e.g., building student lounges filled with college related materials).

Academic Advising and Counseling. Though Knight-Diop's study offers evidence that environment and culture may compensate for thinly stretched counseling resources in some cases, inconsistent or marginal academic advising practices at the secondary level compound the challenge (Venezia, 2008). Farmer-Hinton and Adams (2006) suggest that maintaining a staff of school counselors clearly focused on promoting college-going behavior should remain a core strategy for high schools. A qualitative case study analysis of interviews with counselors in a brand new preparatory academy serving mostly low income and minority students led the authors to conclude that counselors were responsible for creating new norms of college access, especially for students with limited experience and knowledge about college. Another of the studies that viewed college readiness through a social capital lens, this examination determined that high school counselors serve as cultural change agents for students, particularly for those who historically lack the benefits of strong educational and familial networks (in this case, African Americans). Though teachers were not the subjects of this research, it may be assumed that their influence on school culture plays a role as well. From the school's first graduating class, 61 percent of students were accepted to four-year and two-year institutions. This rate stood in stark contrast to the community's average high school graduation percentage, which was a dismal 33 percent.

Casanova (2010) offers further evidence that a staff of school guidance counselors focused on ensuring “the student’s gaze [is] directed beyond high school” (p. 29) elicits a significantly positive effect on college going behavior. Her book *Si Se Puede!: Learning from a High School that Beat the Odds* tells the story of Cibola High School, a large comprehensive public high school with a Latino(a)/Hispanic student population of nearly 75 percent located in Yuma, Arizona (and, incidentally, a school that is currently participating in the MOWR initiative). Over a 20-year span, Cibola has “succeeded in graduating almost all of its entering freshman classes and regularly sending over 80 percent of those graduates on for further education” (p. 83). A significant portion of this success, which bucks statistical trends for the school’s demographic composition, is attributed to the work of the counseling office; described by Casanova (2010) as the “heart of the school.” She asserts that by maintaining high academic standards for students and supporting them with “assertive guidance” (p. 42) to compensate for the students’ paucity of social capital the school has created a culture in which a college degree is the students’ normative educational expectation rather than the exception. While counseling alone cannot explain the school’s unusual success, the emphasis school leaders placed upon it indicates the significance of the function.

Family and Peer Contexts. Not all studies emphasize the counseling role, or the role of any school staff for that matter, in preparing students for college. Notably aggregated in Jeynes’ (2007) meta-analysis of 52 studies that explored the role of parental involvement in academic outcomes, much of the empirical research on urban high school students finds a statistically significant, positive relationship between parental engagement and academic achievement. Relative to the college readiness of

underrepresented minority students, family involvement has been shown to impose an equally prominent influence. Through analysis of interviews and brief surveys of approximately 50 students (all graduates of one urban school district) attending a mid-sized four-year university, Holland (2010) found that students were less likely to identify their teachers and counselors as influences on their college going behavior than family and peers. In this sample, 93 percent of the participants self-identified as African American or Black (the remaining seven percent as Latino(a)/Hispanic, African, multiracial, and American), 70 percent were women, and 95 percent received some type of financial aid. Holland (2010) observed that a majority of the students indicated family influence had significantly shaped their choices to attend college.

In this study, the researcher concluded that students' motivations were generally based on the desire to improve their families' financial prospects, social mobility, and economic stability. The students described the importance of formal family networks of support (including role-modeling from siblings and cousins) as well as less formal peer networks that they described as influential in their decision-making about college. Holland (2010) argues these informal and formal systems of family members, friends, and trusted network members provided sources of social capital that helped raise the students' expectations of going to college. In short, the students reported that members of their personal networks wanted them to pursue postsecondary education and provided them with support to do so. Despite the fact that students did not feel they had received much school-based information about colleges, applications, financial aid, and scholarships, their strong social supports allowed them to remain focused on college plans.

Research shows that family, kinship, and peer influences on college readiness are not exclusive to urban environments. Yamamura, Martinez, & Saenz (2010) drew similar conclusions about the role of family and community while studying the college going behaviors of Latina(o)/Hispanic students in the rural south Texas border region. This study took an intersectional perspective that theorized the unique qualities of borderland communities (e.g., cross cultural influences, transient migration patterns, normative ideas of labor roles, and language differences) are capable of affecting student behavior. The study asked: What types of intrinsic cultural wealth can be utilized to improve college readiness for Latino(a)/Hispanic students? The authors postulated that proliferation of a college readiness culture in the South Texas border region would depend upon developing a family-centered, community engagement approach (Yamamura, Martinez and Saenz, 2010). Unfortunately, the team recorded a commonly held sense of resignation in the community that, despite a collective desire among educators to promote college readiness, the vast majority of students would never achieve college ready status.

In a rural, agricultural community that values labor over education, Yamamura, Martinez and Saenz (2010) predict that the community can only develop navigational capital around the concept of college readiness through continuous dialogue about college preparation, particularly among first generation immigrant families. The authors suggest a wide variety of stakeholders in this borderland community (i.e., teachers, counselors, parents, and peers) hold sway over the college-going prospects of students. While emphasizing in-school influences slightly more than Holland (2010), both studies suggest that peer and community influences are important factors leading to widespread college access. In tandem with the evidence that ‘college knowledge’ (above and beyond

academic proficiency) is fundamental for attainment of college readiness, these findings are particularly salient when considering MOWR, a policy wholly predicated on academic metrics.

Student Perceptions of College Readiness

Several scholars have documented and analyzed students' perceptions in order to define college readiness from their perspective. Using a qualitative phenomenological analysis of interviews to uncover student perceptions of college readiness, Byrd and McDonald (2005) frame the question 'from the inside out,' analyzing the personal accounts of a small group of first-generation students who had earned associates degrees in community college and who had subsequently matriculated to four-year colleges. Their findings revealed that the students did not identify academic achievement as the primary reason for success at the postsecondary level. Although the students consistently referenced the importance of well-developed reading skills, they more often credited family, cultural background, and workplace experience for their foundational readiness. Additionally, the researchers found that the students' strong sense of agency (i.e., self-advocacy and the degree to which they believed they were responsible for their own success) was characteristic among the group. This suggests students' definition of college readiness is more in line with holistic characterizations than with definitions that focus on in-school performance alone.

Reid and Moore's (2008) record of the oral histories of first-generation urban college students (African-American and Ghanaian immigrants) supports this notion while simultaneously indicating that students are also aware of the academic dimensions of preparation for college. Like Byrd and McDonald (2005), this study examined the college

readiness perceptions of students already in college. Framing their findings through a theory of social capital lens - though surprisingly with no reference to Pierre Bourdieu (1986) - Reid and Moore (2008) conclude that students understand college readiness to be a function the strengths and weaknesses of their support networks (e.g., school interventions and familial encouragement) *and* of their accumulation of academic skills. Of the 13 students in the sample, the majority reported a belief that they lacked essential math, reading, and writing proficiency as well as the basic time management skills necessary to be successful in the unsupervised living climate of college.

Barriers to College Readiness

Among the many barriers to college readiness, the misalignment between high school curricula and graduation requirements regularly causes students to fall short of being prepared to meet the challenges of postsecondary schoolwork (Adelman, 2006, Conley, 2007). In particular, Conley (2007) delved into the link between academic requirements and college success at a time when state-level education leaders were establishing policies to install standardized high school-level assessments as the gauge postsecondary readiness. His investigation into the alignment of statewide high school tests with the academic skills and knowledge students need to be adequately prepared for entry-level university courses found that of those he studied, most high school exit exams contained only a small portion of foundational college-level course content. Conley (2007) concludes that increasing alignment between high stakes high school exit examinations and college level coursework is necessary if such tests are to provide valid measures of college readiness.

However (as noted earlier), while the transition is underway, states have not yet pegged high school assessment systems to college readiness benchmarks (Nagaoka, 2009). It is also notable that despite MOWR's inclusion as a state sanctioned initiative, its internal assessments bear no impact on Arizona's federal reporting of student level performance and are not documented as part of any federal or school/district/state accountability measures.

Room for Additional Research

The extant research indicates that effective school leadership coupled with mechanisms that promote a positive school culture (e.g. rigorous curriculum, supplemental college oriented activities, universally high expectations, and a high functioning guidance and counseling program) can create and sustain capacity for institutional and interpersonal structures that promote college going. Among low-income, minority students, these structures can positively affect the prospects of college going behavior when deployed with regular provision of college related information and communication. Perhaps more importantly, the research shows that informal structures such as family support and peer influence play a significant a role in the meaning and decision-making processes of young students of color in their pursuit of higher education. Therefore, research that relates to students' lived experiences within the context of a particular educational structure can provide insight into the effectiveness of that structure. If MOWR's supporters hope to produce the outcomes at the heart of implementation goals, they will need to ensure the strategy considers the student level factors that strongly influence those outcomes. Applied to this relationship between policy and student perceptions, my research questions seek to help determine whether or not wide

scale compatibility between MOWR and the students it serves should be anticipated.

CHAPTER 3

RESEARCH METHODS AND ANALYSIS

A Qualitative Research Approach

The research questions guiding this study address lived experiences, thoughts, factual knowledge, attitudes and aspirations of students. As such, the data collected has been filtered through lenses with which each individual participant views her or his particular circumstance. Mindful of this fact, I chose to take an interpretivist, qualitative methodological approach, anchored by adoption of a grounded theory framework. As Glaser and Strauss (1967) set forth, grounded theory presents the opportunity for the data to tell the story, allowing the researcher to relate ever-evolving descriptions of observed phenomena. The advantage of this approach is that it allowed the study to consider each participant's experience individually, rather than as part of any collectively grouped behavior (Charmaz & Mitchell, 2001).

Additionally, Desimone (2009) suggests that the qualitative approach enables the social scientist to examine “unintended consequences as well as the relationships and links that might not have been originally hypothesized by the policy designers or implementers” (p. 169). According to her, a qualitative perspective of inquiry in the context of a policy can highlight both the challenges inherent in its implementation and provide an opportunity to explore its implications deeply. As she puts it, a “strength of exploratory, in-depth approaches to data collection is their ability to capture dynamic, interactive, subjective phenomena, which often undergird the success or failure of policies and programs” (p. 169).

Methodological Limitations

***A priori* Lenses.** Like all social science researchers, I brought my epistemological foundations and perspectives to the work (Charmaz & Mitchell, 2001; Desimone, 2009; Glaser & Strauss, 1967). Glaser and Strauss' (1967) design for grounded theory recommends that, in advance of fieldwork, researchers limit consideration of erstwhile knowledge as much as possible and avoid conducting any formal review of the literature in the research area. They argue that the study of a phenomenon is better served when a review of the research landscape on that phenomenon is conducted only after data collection has concluded (Charmaz & Mitchell, 2001; Glaser & Strauss, 1967).

In this instance, following the strictures of grounded theory required me to set aside my *a priori* theoretical underpinnings, which otherwise would have limited my ability to record and discern what students are experiencing in the context of Move On When Ready. From a practical standpoint, this was a somewhat unrealistic condition to meet considering my background as a student and educational researcher; one made even more difficult by the academic conventions a student typically must follow during doctoral studies. In addition my professional role working to support the MOWR initiative puts me in close proximity to the schools in which this research was conducted and the school leaders that head them. However, while it may not have been practical to heed the admonitions of grounded theory's pioneers to the letter, I made every attempt to remain cognizant of the biases I brought to this study. I tried be vigilant in my effort to avoid filing the data I collected into predetermined theoretical categories.

Sample Size. Perhaps the most significant limitation of this study was one of scope, particularly relative to the size of the study's sample. Choice of methodology and

restrictions of time and resources made conducting a large-scale, generalizable study of student perceptions unrealistic. I am forced to acknowledge that the data I collected and conclusions I have reached provide only a glimpse into Move On When Ready's impact on small number of students rather than the thousands the policy currently affects.

However, the study was intended to build an empathic view of students' experiences from their perspectives, expanding our knowledge and enhancing understanding of a policy that carries with it significant implications for these students futures despite the study's narrowness.

The Situational Context of the Study

Site Selection. In 2011, 14 Arizona schools were among the first to voluntarily adopt and implement the Move On When Ready strategy. Since that time, an additional 18 schools have joined the initiative. These schools include district, charter, and private schools serving diverse populations of students in rural and urban areas. Of the 32 schools currently participating in MOWR, more than half are large public district comprehensive high schools of more than a thousand students, while the remainder run the gamut from medium sized, rural district high schools to small private schools offering one-to-one instruction models, individual charter schools, and charter networks with more than one school site participating in the initiative. With the exception of three rural district schools, they are located in urban or 'semi-urban' areas. I selected the sites in which to conduct this study from the urban subset of schools, of which many serve "majority minority" (primarily Latino(a)/Hispanic) student populations.

For the comparative design of this study, site selection was guided, in part, by a desire to choose two sites that maintain common instructional and administrative

structures but cater to students from differing socio-economic and ethnic backgrounds. The site selection process was also driven by practical considerations such as a school administration's willingness to accommodate my doctoral research and by my estimation of the likelihood a school's students would present an opportunity to learn about perceptions of MOWR.

Keeping the above conditions in mind, I selected two school sites for this study. Both of these schools are managed under a charter granted to a large, public research university through a charter management organization referred to in this paper as Collegiate Charter Schools. Though both schools operate under the same administrative umbrella, the two schools serve significantly different student populations in terms of demographics, size, and historic academic performance.

Located approximately thirty-five miles apart from one another in a large metropolitan region of Arizona, these K-12 charter schools were among the first group of schools to implement MOWR in the academic year 2011-12. Both schools opened their doors to high school students for the first time in that year, choosing to adopt the Cambridge IGCSE Curriculum and testing scheme for all students (in what is commonly referred to as the 'whole school' model).

The first of the schools, located in a heavily populated, downtown, urban center, serves approximately 110 students in each high school grade level. I refer to this school as Collegiate Charter Centrum (Centrum). A large proportion of this school's student body is comprised of non-native English language speakers and students of Latina(o)/Hispanic heritage from households in the bottom socio-economic quartile. On average (from 2011-2013), only about 70 percent of students at Centrum showed

proficiency on Arizona's grade eight reading assessment (AIMS). Fewer than 40 percent of Centrum's eighth students achieved proficiency on the mathematics assessment.

Centrum is housed in a large, modern school building that was once operated as a K-8 school by a large metropolitan Arizona public elementary district. After closing its doors to the neighborhood's students, Collegiate Charter Schools contracted with the district to occupy the facility as a K-8 charter school. Securing a second charter to offer instruction to secondary education students, the Centrum high school now occupies half of the building's classrooms. This means students from grades ranging from kindergarten to 11th often share common spaces, hallways, and the media center (library), the auditorium, lunch and recreation facilities. It also means that siblings of various ages are often at school together under the same roof.

The Centrum campus is unique in that, unlike most Arizona charter schools, many of the students enrolled there would have attended school in the very same building if it were operated by the local public district. In other words, under a different name and administration, the Centrum site would have housed the neighborhood school for many of the school's students and their families.

To the east of downtown, in the outer suburbs of the metro core, is Centrum's sibling school. I refer to this site as Collegiate Charter Atrium (Atrium). The Atrium high school maintains grade sizes less than half as large as Centrum's. It is housed in a small, self-contained and re-purposed office building, which is co-located on a satellite campus of the charter-holding university. Atrium's elementary and middle school students attend classes in a separate building about a half-mile down the road. Since there is no 'neighborhood' to speak of in the immediate proximity of the high school building (other

than university housing for undergraduate and graduate college students), Atrium stands in sharp contrast to Centrum's station as a neighborhood school. No Atrium students would have been enrolled at this school site by default if it were part of a public district school. It is a school of choice in the realest sense.

The student population on the Atrium campus displays a moderate level of diversity (captured in the composition of the subject group). However, the school primarily serves suburban, White students from the upper half of socio-economic spectrum. Student performance on state assessments sharply contrasts that of Centrum. Greater than 80 percent of the Atrium students achieved proficiency on Arizona's grade eight AIMS in both reading and math assessments.

In addition to being drawn by the interesting characteristics of both schools, there were other reasons I selected these two sites for this study. Foremost was the fact that I was familiar with this particular charter management organization. Through my job, I had worked directly with school leaders from the schools and I was confident that they would be amenable to my research proposition. I was also familiar with a 2012 study of MOWR implementation strategies conducted by my immediate supervisor, in which the Centrum site was prominently featured. I felt it would be a wasted opportunity if I did not use some of the only extant research on MOWR to help triangulate the findings of my study.

In her 2012 paper, Amanda Burke, Director of Education Innovation at the Center for the Future of Arizona, conducted a mixed-methods case study analysis focused specifically on implementation strategies employed by schools adopting the MOWR model. Burke (2012) noted that implementation of the MOWR model took different forms on different campuses and that several factors influenced the scope of

implementation and the relative influence the policy had on each school's efforts to promote college readiness. Her study was an insider's view of the implementation process, taken from the perspective of the organization managing the policy's statewide implementation and monitoring. In her research, Burke found that the various ways in which MOWR had been operationalized in schools depended on factors such as leadership capacity, receptivity to change, the district or charter organization's management style, and general conception of the qualification system model, among others. These differences surfaced despite the fact that schools had received consistent messaging and direct technical support from CFA (the type of intermediary entity I refer to as a 'policy enactor').

Burke's (2012) paper singled out Centrum as the school that had demonstrated the highest level of MOWR implementation in her comparison of five peer institutions. Her data indicated the school's leaders and teachers were generally committed to the philosophical underpinnings of a qualification system and that they had embraced the instructional and assessment structures of the Cambridge IGCSE curriculum. While still in the early stages of implementation at the time of the study's write-up, it appeared Centrum was well on its way to faithfully operationalizing the MOWR policy and helping sizable numbers of students qualify for the Grand Canyon Diploma.

Sample Composition. The study subject pool consisted of fourteen CCS students – seven students from Centrum and another seven from Atrium. The selected students were part of CCS' third-ever 9th grade cohort of students. At the time of data collection, neither school had graduated a senior class of students. Students were recruited based on several factors including 1) the students' willingness and availability to participate in the

study; 2) nomination by school staff and faculty based on students' likelihood of responding openly and honestly while being interviewed; and 3) estimation of which students were apt to provide the broadest spectrum of student experiences, taking into account the input of the schools' faculty members and administration. I sought to build a sample pool of students who represented a relatively high level of diversity in terms of ethnic, socio-economic, and academic circumstance (both within and between the two schools), specifically inclusive of Latino(a)/Hispanic students. In addition, I conducted interviews with two CCS administrators, including the primary academic Administrator overseeing instructional design at both school sites and the Principal of Atrium. These two interviews were not included in the initial research design, but were added later in order to provide supplemental context, particularly as it related to research question number three (regarding the effect of students' support networks on their understanding of educational success within MOWR).

At Centrum, the sample group consisted of four female and three male students. At Atrium, it consisted of three female and four male students. The self-identified ethnic ancestry and gender of the 14 subjects at each campus are compiled in Table 1. Each student was interviewed for this study twice over the course of the academic year. Students were interviewed once in November of their ninth-grade year and again in the spring semester (April/May) of that year. The gap in time between the interviews was intended to uncover whether student knowledge and perceptions of the policy changed over time.

Table 1

Sample Group Composition

Ethnic Ancestry	Centrum Student	Atrium Student
African American		1 (M) Omar
Filipina	1 (F) Veronica	1 (F) Daphne
Hispanic/Latina/Latino	6 (3F, 3M) Maria, Minerva, Iseleta, Daniel, Paulo, Jose	
Lebanese		1 (M) Amir
Native American		1 (M) Rudi
White		3 (2F, 1M) Megan, Penelope, Ryan

Purposive sampling. The interview pool was selected using a process known as stratified purposive sampling. This tactic allowed me to identify subjects on the basis of their likelihood to illustrate characteristics indicative of certain subgroups and fit the practical limitations of the research study (Oliver in Jupp, 2006). With the help of faculty and staff from both schools, I needed to make judgments about students prior to having met with them. However, by intentionally seeking to select students with varied backgrounds and perspectives, I was able to reduce the chances of encountering ‘sameness’ among the participants that could have compromised the ability to compare the students with one another. In addition, this selection process was designed to identify some of the different rationale used in students’ decisions to pursue or forego pursuit of the GCD. I did not use information garnered from the nomination process as central to

the study. However, access to this information allowed for a broader contextual rendering of the entire 14-student interview group.

As a result, the individual cases of these purposefully sampled subjects revealed some of the nuances of the MOWR policy. That this sample might have been unrepresentative of the larger student population participating in MOWR was less relevant than it would have been in a large-scale quantitative study of student outcomes. In keeping with the ontologically interpretivist disposition of this study, my primary concern was that the stories of the participants I recruited were capable of revealing something ‘real’ (in a non-Lacanian sense) about MOWR and its influence within the educational climate of high school. As Stake (1997) framed it most poetically, I was seeking to find “sweet water” (p. 402) that bubbles to surface out of a “muddy mess” (p. 403) of data.

Timeframe and Scope. The duration of the data collection phase for this study was slightly longer than one academic-year. It ranged from the first months after the students’ entry into high school until the point at which they were preparing for their first end-of-course examinations (at the end of grade nine). I interviewed student participants once during the fall 2013 semester and again during the spring 2014 semester, for a total of two interviews per student. The two administrator interviews were conducted in November 2014, after each school had received exam results from the previous spring. This schedule was designed to allow analysis of the interviews to track the evolution of student perceptions of Move On When Ready over the period of time from entrance into high school to the latter part of the first year experience. Whether perceptions converged or diverged among and between the cohorts was examined through this longitudinal

temporal lens. Participants' end-of-course examination scores from tests they took in May/June 2014 and subsequently released in mid-August 2014 provided a set of summative data points that were considered in the study. Although this study was not designed to examine student outcomes, these data helped provide some indication of how students' perceptions, attitudes, motivations, and aspirations translated in to academic results. Though no obvious links were uncovered, the findings may be instructive to schools as they approach future implementation and communication of the MOWR initiative in these and other schools.

Ethical considerations

In the process of establishing relationships with subjects, I was seeking to gain knowledge of their inner thoughts, reactions, attitudes and perceptions relative to lived experiences both inside and outside of school. Since such access bears with it a responsibility to safeguard subjects, this is the area of my study over which I, as investigator, attempted to exert the greatest amount of caution and respect for the students. Steps were taken to ensure the subjects' security and confidentiality. In doing so, my role as researcher took on that of a guest (Stake, 1994), treading lightly around any conversations that could have potentially brought distress to a subject.

Ethical considerations required for sound research on human subjects obliged me to disclose the fundamental nature of inquiry and secure consent of each subject to participate. A copy of the participant recruitment letter developed for the study is attached as APPENDIX A. It contains a statement of purpose, information on maintenance of confidentiality and security protocols and conditions of participation. It also includes signature lines indicating both participant and parent consent, since the

primary subjects of this study were younger than eighteen years old at the time of the interviews.

Proximity of the Researcher to the Research Topic. This study is an outgrowth of my broader interactions with the Move On When Ready policy through my professional role for two organizations intimately involved in its design and implementation. Employed as an Education Innovation Research Fellow, my job entails work for both NCEE (the principal designers of the MOWR policy) and the Center for the Future of Arizona, the non-profit organization contracted the Arizona State Board of Education to promote and manage its implementation. I have included a brief description of my job roles and responsibilities as APPENDIX B. This position has enabled me to develop a deep familiarity with the policy's framers, managers, administrators and advocates. At the same time, the role has put me in close proximity to the schools attempting to leverage the policy as part of their educational missions. This intimacy with the policy and its institutional stakeholders provides a bountiful source of experience from which to draw. However, in in the context of this study, it also invites a level of tension for my research activities.

The pressure results from the fact that sound research requires close scrutiny of phenomena and the environments in which they occur. Further, this particular research endeavor requires that I draw conclusions about the behavior of individuals with whom I have worked closely in the past (and hope to continue supporting in the future). Over the course of my employment, I have developed personal relationships with the leadership and staff at both of the schools where the subjects of this study are enrolled. I have gained knowledge of their philosophical dispositions and have been privy to many of the

difficult decisions these individuals have undertaken relative to MOWR. This privileged access carries with it an ethical burden. That is, there is a compelling need to balance the obligation to report on this topic as honestly as possible with my desire to provide care and maintenance for my professional and personal associations. If here is a scholarly source that addresses this specific line between researcher and subject, I have yet to find it.

Institutional review

Institutional review of this study was a step in the research process designed to legitimate the investigation, safeguard it participants, and indemnify overseeing institutions. Therefore, securing permission from my institution, Arizona State University, and the charter network was necessary to gain access to high school students. Upon receiving permission to proceed with the study from the University's Institutional Review Board and the school sites, I was able to begin the task of recruiting study participants for the series of face-to-face interviews that comprised the primary source of data for this study (see APPENDIX C).

Data Collection to Support a Qualitative Case Study

In the investigation of my research questions, methods of inquiry included the use of field notes, journals, and interviews to form a bounded case study. Addressing the research through a combination of approaches contributed to the richness of the data promoted the legitimacy of assertions derived from them as well. While I was able to draw varying conclusions after applying multiple methods of inquiry, the data yielded consistent findings that enable me to profess strong warrant for the claims I have developed (Phillips and Burbules, 2000; Smith, 2006).

As a mode of inquiry, case studies offered personal glimpses into phenomena in the contemporary ‘here and now’ for both the subject and the researcher. Data collection and evaluation in this type of research were conducted simultaneously in order to provide a firsthand consideration of the research question (Yin, 2006). This study adopted an approach that employed multiple, concurrent case studies in order to compare and contrast the experiences of different students – e.g., from different backgrounds and schools through a combination of observation, personal conversation, and interviews (Yin, 2006). While it is inherently difficult to generalize case study findings (even when conducted concurrently or upon a large number of subjects) the intent of this investigation was to identify some of the phenomenological attributes of students’ relationships with Move On When Ready. Further, as Yin (2006) acknowledges, case study serves as an effective vehicle through which to consider previously rendered theory.

Semi-Structured Interviews. Once a subject group for the study was identified and informed consent obtained from the participants, I began to collect primary data. The interviews of students and Collegiate Charter School administrators were conducted in a semi-structured format in order to maintain conversational tone and put subjects as close to ‘at-ease’ as possible. Student interviews, of approximately twenty to thirty minutes in length, were face-to-face, in-depth conversations that were conducted in the private conference room of each campus. These conversations were captured on a digital audio recording device paying attention to audible cues that added to the richness of responses and further informed my interpretation of data. The intent was for interviews to allow me to develop detailed accounts of the educational and school-related social experiences to

which the subjects have been exposed. Copies of draft interview protocols for interviews are included in this proposal as APPENDIX D. The interviews were piloted with two test subjects to ensure the instruments were capable of eliciting the types of responses that will address the research questions. The data derived from the pilots were not used in the final data set. As a token of appreciation for his or her participation, each student received a \$10 Target gift card at the conclusion of the interview.

Outlining the interview process, Kvale (1996) describes the researcher as the primary research instrument. As she puts it,

The interviewer must continually make quick choices about what to ask and how; which aspects of a subject's answer to follow up—and which not; which answers to interpret—and which not... The interviewer should have a sense for good stories and be able to assist the subjects in the unfolding of their narratives.

(p.147)

The decision to select subjects based on nomination of school staff is consistent with what Stake (1994) would refer to as an 'intrinsic' form of inquiry in which subjects are selected based on the merits of the 'interestingness' of a particular case. In my intrinsic case study, I was able to gain access to two school sites and fourteen of their students (seven at each school site). Comparative analysis of students in two schools as opposed to an entire district or municipality represented a manageable 'bounded system' (Smith, 1978 in Stake, 1994) and served the purpose of developing a "concentrated inquiry into a single case" (Stake 1994, p. 237).

Memos. Through the course of the data collection process, I employed a regimen of memo taking and field notes when applicable (Chamaz, 2006). The ongoing series of

memos reflected my thoughts and intuitions about what I observed at the time (Glaser & Strauss, 1967; Miles & Huberman, 1994). The memos were time stamped to correspond with the interview transcripts (Miles & Huberman, 1994).

Journal. A journal of early reflections on the interviews prior to formal transcription served as a record of my activities and behavior (as researcher). The journal was the primary format for chronicling events, thoughts, and feelings of personal importance for the purpose of identifying any relationships to the study participants that might influence my interpretation of the data. I used a two-column note taking approach toward journal entries. Sorted into two columns, I used left hand column of the journal to record actions and events. The right hand column was used as a space for documenting thoughts or observations. The journal entries were not bound by any pre-conceived construction and included thoughts or impressions while observing events in the schools, talking informally with students, and interacting with teachers and administrators engaged in Move On When Ready. In so doing, I was able to develop a more nuanced portrait of the research process itself, which was helpful for understanding the context that surrounded the student-driven data.

The complimentary methods outlined above were employed sequentially, based on the premise that the purpose of “interactive sequential methodology is not to measure the same phenomenon at the same time, but to use the findings of one methodology to inform the issues to be addressed in the subsequent study” (Desimone, 2009, p.168).

Data analysis

In an exploratory investigation such as this (i.e., one applying a grounded theory approach toward a previously unstudied phenomenon), it was necessary to refrain from

making predictions as to what the data would reveal or from developing a coding scheme in advance of analyzing the data. Despite my self-admonishment to conduct this study without consideration of pre-conceived notions of potential findings, I must acknowledge that absolute discipline in this regard was virtually impossible.

Coding. In the process of coding the interview transcripts, I worked to account for both confirming and disconfirming evidence relative to what I may have initially thought the study would reveal and record indications of things unexpected (Miles & Huberman, 1994).

Lareau (1989) suggests this approach is methodologically acceptable in a qualitative research exercise, going so far as to state, “using qualitative methods means learning to live with uncertainty, ambiguity, and confusion, sometimes for weeks at a time” (p. 198). Further, the process of emergent coding is supported by several scholars who find value in allowing trends, similarities and differences, and themes to be encoded and grouped only after the researcher has had time to initially reflect on the data (see, e.g., Glaser & Strauss, 1967; Charmaz, 2006; Merriam, 2009). Moreover, these themes need not refer exclusively to the particular phenomenon being studied. Saldaña (2009) advises, “A set of themes is a good thing to emerge from analysis, but at the beginning cycles there are other rich discoveries to be made with specific coding methods that explore such phenomena as participant process, emotions and values” (p.13). Such methods include *descriptive coding* to aggregate or differentiate characteristics across subjects, *in vivo* Coding which uses study subjects’ own words (quotes) to develop codes, and *values coding* to apprehend the underlying perspectives that drive subjects’ responses (Saldaña, 2009).

The implication is that it was both reasonable and appropriate to enter into the data analysis phase without having identified that which I was looking to glean from the data in advance of data collection.

Only after all student interviews were recorded, professionally transcribed and checked against the audio records for accuracy did I begin the coding process. For this I employed several levels of analysis. The first entailed the development of a set of descriptive codes to identify characteristics of each of the subjects. This was done in order to identify demographic information about the interviewees that might prove helpful in grouping or differentiating the students for comparative purposes throughout the analysis.

Table 2

Descriptor Codes

School Site	Centrum Atrium
Gender	Female Male
Ethnicity	African American Filipina Hispanic/Latina(o) Lebanese Native American White
Interview session	November 2013 Spring 2014

The next phase of coding was comprised of categorizing responses through a process of open coding. This was based on my initial reactions to the data (Strauss & Corbin, 1998). Through open coding, I was able to use encode the data to identify and promote “essential elements of the research story that, when clustered together according

to similarity and regularity – a pattern – they actively facilitate the development of categories and thus analysis of their connections” (Saldaña, 2009, p. 8). The open coding process was followed by a tertiary labeling system whereby I applied a set of sub-category codes that held specific relevance to the four central research questions (Miles & Huberman, 1994) and through which categories evolved to form thematic groupings within the context of my inquiry (Strauss & Corbin, 1998).

Data Analysis was conducted on an ongoing, reflective basis and, in keeping with my grounded theory perspective, I took great pains to keep prior theoretical constructs at a distance. My approach to analyzing the interview data followed a process of labeling information, or coding, to ultimately identify themes and consistencies as they emerged (Saldaña, 2009). These were used to organize the data in a patterned manner so it could be easily separated and categorized, then retrieved for analysis (Miles & Huberman, 1994). The codes were categorized by their broad relevance to the Move On When Ready policy and students’ relationship to it. Sub-category coding either aligned to the research question or captured student responses peripheral to the central questions that revealed something about their college going behaviors and academic preparation (intertwined with other outlying perceptions of MOWR and the GCD).

Once the descriptive codes (descriptors) were developed, I uploaded the transcripts into a commercially available qualitative data analysis software program, *Dedoose*, a web-based qualitative research tool designed to aid in the labeling,

organization, and analysis of textual data. During the analysis phase, the software allowed me to manipulate code patterns and scrutinize the data for eventual write-up.⁵

Table 3

In vivo and Values Codes

Level two Open Codes (primary codes)	Level three Emergent codes (categories)	Level four Emergent Sub-categories (themes/values codes)	Application to Research Question			
Academics	MOWR	No knowledge	RQ2	RQ4		
		Limited knowledge	RQ2	RQ4		
		Misinformed	RQ2	RQ4		
		Is as it sounds	RQ1	RQ2	RQ4	
		College ready	RQ1	RQ2	RQ4	
		Cambridge	Rigorous/Hard	RQ1	RQ2	RQ4
		Helps prepare me	RQ1	RQ2	RQ4	
		Good Job/Career	RQ2	RQ4		
		Shows intelligence	RQ1	RQ2	RQ4	
	GCD		No knowledge	RQ1	RQ2	RQ4
			Little knowledge	RQ1	RQ2	RQ4
			Misinformed	RQ1	RQ2	RQ4
			Early graduation	RQ1	RQ2	RQ4
			Scholarships	RQ2	RQ4	
			Grand Canyon Univ.	RQ2	RQ4	
	Grades		Indicator of readiness	RQ1	RQ2	RQ4
			Linked to IGCSE exams	RQ1	RQ2	RQ4
			Not linked to IGCSE	RQ1	RQ2	RQ4

⁵ Commercially available qualitative data analysis software allows users to organize interview data in a number of ways. Though I did not employ all of them, the software allows for an extended number of coding levels, including (among others):

- Word/Phrase frequencies
- Subject/object relationships (e.g., self-referential pronouns such as ‘I, me, my’)
- Primary and subset coding (e.g., Primary code: Academics; Secondary code: four-year university, Care about students, good career)
- Word usage (e.g., adjective and adverb use)

Lewins & Silver (2007) provide a particularly useful analysis of the capabilities and limitations of such software in their work *Using Software in Qualitative Research: A Step-by-Step Guide*.

	Cambridge	Feeling nervous	RQ1		RQ4
	Exams/	Hard	RQ1	RQ2	RQ4
	Coursework	Deeper understanding	RQ1	RQ2	RQ4
		Prepared for Exams	RQ1	RQ2	RQ4
		For college credit		RQ2	RQ4
	Support/Help	Help from teachers		RQ3	RQ4
		Help from parents		RQ3	RQ4
		Help from friends		RQ3	RQ4
		Help from classmates		RQ3	RQ4
		Help from the internet		RQ3	RQ4
Family	Parents	Chose school		RQ3	RQ4
		Pressure to succeed		RQ3	RQ4
		Encouragement		RQ3	RQ4
		Exemplars		RQ3	RQ4
		Anti-exemplars		RQ3	RQ4
	Siblings	Role modeling		RQ3	RQ4
		Anti-modeling		RQ3	RQ4
Peers	In-school	Warn about IGCSE		RQ3	RQ4
		Work together		RQ3	RQ4
School Staff	Teachers	Help prepare for college	RQ1	RQ3	RQ4
		Care about students	RQ1	RQ3	RQ4
		Source of info		RQ2	RQ3
	Admin	Supportive	RQ1	RQ3	RQ4
Future	Career plans	Professional		RQ2	RQ4
	College	Four-year college (all)		RQ2	RQ4
School	CCS home	"Smart" school	RQ1	RQ2	RQ3
	campus	Charter is not public	RQ1	RQ2	RQ3
		Close knit		RQ3	RQ4
		Limiting		RQ3	RQ4
	Other CCS	Same			RQ4
	Site	Students are the same			RQ4
	"Regular"	More activities/fun		RQ3	RQ4
	Schools	Less caring/Don't care		RQ2	RQ3
		Fighting/Bullying/Unsafe		RQ3	RQ4

One of the major advantages to coding on a software platform rather than with pen and paper is that I was able to avoid using a shorthand system, which saved time and facilitated the use of longer, more complex codes (e.g., “pressure from parents,” which evolved as an emergent sub-category, or theme). Once loaded and labeled with

descriptors, I began to apply my scheme of second-level open codes. I was then able to read through the transcripts in two ways. I first read the text of each interview individually from beginning to end, adding emergent codes (categories) as I read them multiple times. This was followed by a reshuffling of the transcripts into groups of passages with shared emergent sub-categories. More often than not, a section of text would be coded with more than one second-level open code. I could then apply emergent sub-categories to distinguish themes in the data. The final coding step was to attach research question application labels to these groups in order to determine which research question the response was best suited to address. Research question number four, which pertains to comparing student perceptions within and between the school sites, was applied to all of the sub-categories.

This digitally aided process complimented my manual analysis of transcripts, field notes, memos, and journal entries and provided a multi-faceted approach to the inductive inquiry process that was built in to the design of this study. Surveying multiple sources of data allowed me to develop a more cohesive theory of how MOWR implementation in two separate schools affects different students across the arc of their first high school year. That is, I used the data to identify items apprehended by each research subject and, additionally, to scrutinize the student's abilities to make sense of their educational circumstances both across and between the two schools.

Diagramming. As I approached this topic through the emergent process of grounded theory, I began to create visual representations of the meaning I was making from the data. These allowed me to model the data in an alternative to written analyses. These models, untethered from dialectal constraints, were intended to produce renderings

of the student perceptions around which I was attempting to develop a theoretical construct. A secondary motivation for diagramming was a bit more pedestrian, as I had found the practice served as an estimable short-term remedy for ‘writer's block.’

The figures below represent some of the earliest concept drawings and models that I created following the first round of student interviews.

Figure 1 (below) may look like a page of scribbles, and in many ways it is just that. However, it represents one of my earliest attempts to situate students and their perceptions of policy within the context of their physical and relational environments. Some of the sketches depict students corporally at the center of an education universe. Others seek to conceptually portray perceptions as commodities or resources. My labels and notes show the nascent hypotheses brewing in my efforts to make meaning of the data.

Figure 1. Early Conceptual Sketches to Represent Data

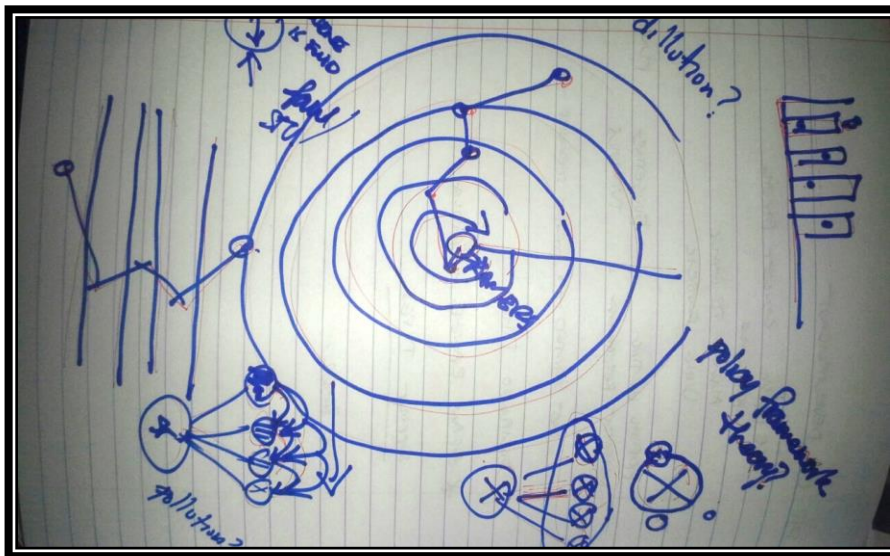


Figure 2 represents another early attempt to capture how various mediators of the policy message shape student perceptions of the Move On When Ready policy. It

envisioned a process of dilution, whereby each additional layer of mediation further watered down the policy intent (originally a concentrated concept) as conceived by the policy's framers. It proposed that policy clarity was the characteristic of policy intent most significantly compromised by various levels of message mediation. I further posited that students' conceptions of policy, being most salient to them, held the greatest volume in terms of importance. At the same time, the dilution of intent left students to consider large volumes of diffuse information (i.e., the least dense in terms of fidelity).

Figure 2. Early Diagram of Policy Dilution

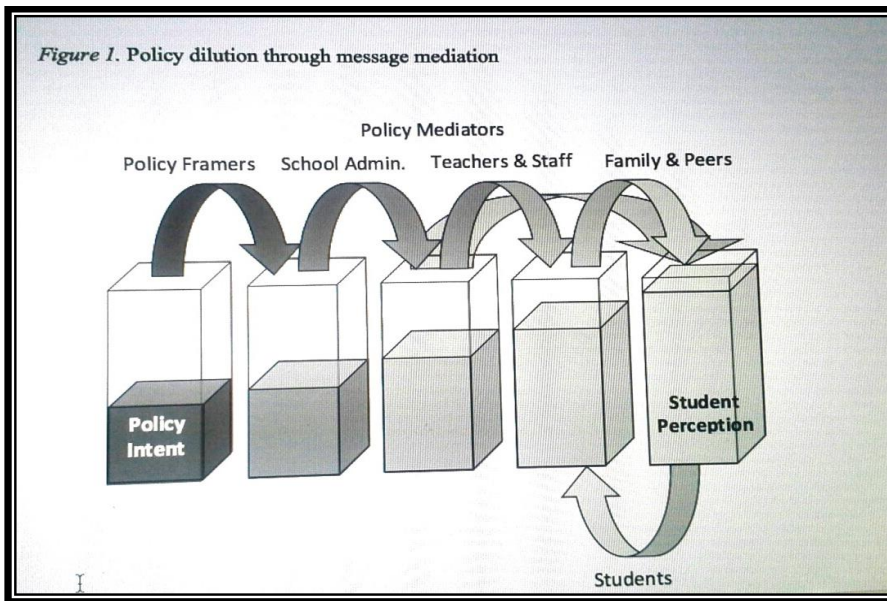
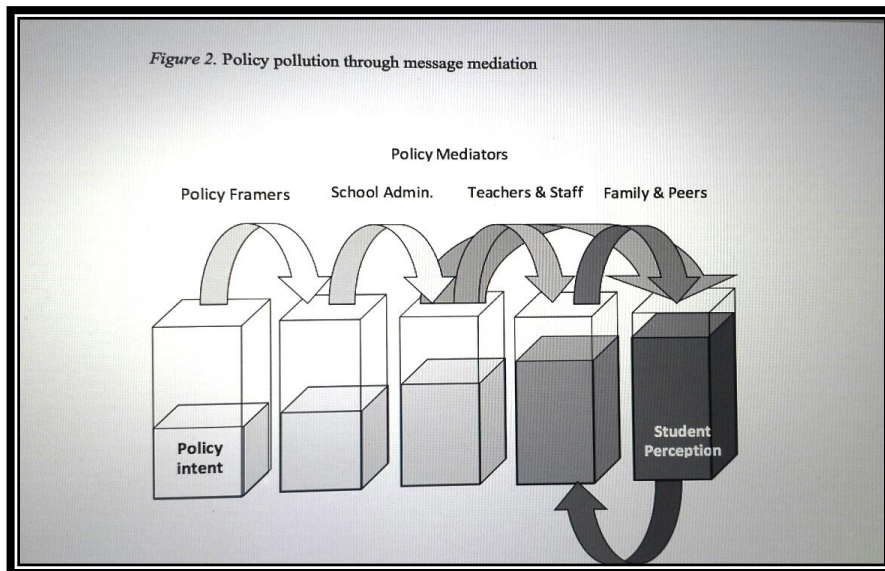


Figure 3 was an attempt to reconsider the same phenomenon from an alternate perspective. I wondered if policy intent might become polluted rather than diluted through the process of mediation. I asked, how might that better explain the phenomenon? As it turns out, this line of thinking brought me closer to my eventual conclusions.

The limitations of these early figurative models were numerous. For one, the

diagrams imagined the process of growing student perception as a linear process. Secondly, they assumed students are the least accurately informed perceivers of policy. Neither of these presumptions is particularly accurate. Thirdly, the renderings do not account for the varied influence of the different mediators in the process. As the liabilities in the models mounted, I quickly abandoned the general organization of these early illustrations. Despite the initial failures, diagramming proved to be a valuable tool for data analysis, allowing me to consider the data in multiple ways and broaden my thinking on the topic. In time, these crude sketches and awkward representations evolved into more nuanced constructions informed by the entirety of the data set. Those conceptual models and their descriptions are presented in the “Conclusions” section of this paper.

Figure 3. Early Diagram of Policy Pollution



Validity

In the research community, the bar for establishing validity of one’s inferences from interview data is set high. In fact, the standard is so great that it has been referred to

as “the quality of craftsmanship” (Kvale, 1986 in Seidman, 2006). However, certain research strategies are designed to deal with these demanding conditions. One such tactic is the triangulation of multiple data sets (Creswell, 2009; Creswell & Miller, 2000). Essentially, triangulation is the process of seeking validity of data by citing “convergence among multiple and different information to form themes or categories in a study” (Creswell & Miller, 2000, p.126). It was particularly useful to consider multiple data points in a study such as this, where the sample size was small and a single researcher was responsible for analyzing the data. As Desimone (2009) states, “The use of triangulation is based on the premise that every method has particular biases and limitations, so that the use of only one method to answer a policy question will yield biased and limited results” (p. 166). I used triangulation to hedge against such biases (though, in any qualitative study, they inevitably persist).

Because MOWR has not been widely researched, the data analysis process presented only a small number of opportunities for triangulation. At the time of this writing, only two other formal examinations of the MOWR policy have been conducted. One of the two is unpublished. Concurrent with my research, NCEE had commissioned the University of Michigan’s Institute for Social Research (ISR) to coordinate a large-scale mixed methods internal evaluation of MOWR in Arizona and the other states in which the qualification system model had been adopted. The Michigan study focuses primarily on the policy’s implementation, changes to instructional practices at the classroom level and, to some extent, on student outcomes. Because of my employment with CFA and NCEE, I had access to a portion of the study’s preliminary findings. I was able use the ISR study to verify I was on target with my understanding of contextual

features of Excellence for All schools (of which there are approximately 40 nationwide), access academic performance data on MOWR students, and develop a broader understanding of MOWR implementation strategies. Though the ISR study is not intended to capture student perceptions in the manner in which my study is designed, I was able to use the ISR work as complementary data with which to consider MOWR's effects on students' understanding of the policy.

Similarly, while analyzing my primary data sources, I was able to reference Burke's (2012) study of various MOWR implementations in schools across the state of Arizona. Her insight into how the policy was being operationalized not only presented a detailed profile of one of the schools in which I was conducting research (Centrum), but also allowed me to compare my findings side-by-side with her conclusions. In addition, I was able to consider whether conditions at the schools and attitudes among faculty and staff has changed or remained constant since the completion of her research. Ultimately, reflection on and triangulation with both studies improved my confidence in the validity of my findings.

Risks and Rewards of Grounded Theory. Using a grounded theory approach to make sense of interview transcripts, memos, and journal entries invited the possibility that the data might lead me to posit about issues other than those directly related to student perceptions. Metaphorically, grounded theory is a double-edged sword. A stroke in one direction can reveal unexpected and interesting findings peripheral to the topic a study was initially designed to explore. Cutting in another direction, the approach can sometimes leave the original research questions largely untouched. In the case of this study, data emerged as if they had come out on the short end of a duel.

From the outset of my conversations with this particular group of students, the challenge was clear. Specifically, early interviews revealed that most interviewees were not able to identify the Move On When Ready policy by name. Additionally, students were almost wholly unaware that their schools had elected to be party to it. Despite piloting the interview protocols with two students (one at each school) and deeming it sound for the purposes of the study, interview notes, recordings, and transcripts that comprised the data set revealed these alarming conclusions: Neither of the two Collegiate Charter high schools was actively communicating the diploma structure embedded in MOWR (i.e., the Grand Canyon Diploma) nor was it explicitly directing students to engage with the college readiness binary inherent in MOWR's qualification system design. Based on what I thought I knew about the schools from personal experience and what I had learned from the Burke (2012) study, I had anticipated students would be quite familiar with the policy. Only later did I come to understand that the policy's adopters and practitioners at Centrum and Atrium had implemented MOWR as an accessory to their core instructional designs and larger educational missions.

In essence, the dilemma was that I was being stymied in pursuit of my primary line of inquiry while finding answers to questions I hadn't asked. The data I had hoped would reveal insight into student perceptions about MOWR were proving more useful as lenses through which to examine the Collegiate Charter Schools' implementation of the policy. Figuratively speaking, it appeared the data were prompting me to *try to bake apple pies from a bushel of pears*. Nonetheless, my research questions had been established well in advance of collecting data. The thought of making mid- to end-of-course corrections to the research design seemed both impractical and untenable.

Fortunately, grounded theory also provides an escape from what might otherwise halt a research project in its tracks. This is a result of the fact that the grounded theory approach accounts for such events. To a large extent, the research questions are less relevant than the data they drive. In my case, what *can* be gleaned from interviews may ultimately represent salient discoveries about the viability of MOWR and inform schools' future implementations of the model. Ideally these unexpected findings will provide value to policy adopters and practitioners because they speak to what schools might do to maximize positive effect on students' academic preparedness for work beyond high school. The implication is that this study's findings might allow school leaders and staff to better understand the effect of various implementation models and communications strategies on students' engagement and college readiness.

CHAPTER 4

DATA AND FINDINGS

This study was designed to examine student perceptions of an education policy to promote college and career readiness and eliminate the traditional time-based parameters of high school. Analysis of data from 28 student and two administrator interviews led to the identification of a number of emerging themes (Miles and Huberman, 1994). I have organized these findings into a series of claims related to student perceptions and meaning-making around college readiness. Each claim is supported by several examples taken directly from the interview transcripts. Each group of excerpts is indicative of a larger number that could have been drawn from the total collection. That is, the excerpts are offered as representative evidence for the claim. In some cases, students' remarks were so consistent that I could have included responses from all fourteen interviewees as evidence. In the case of one claim, I present performance data from the students' Cambridge IGCSE course aligned examination results for context. Most of the excerpts are presented as blocks of text in an effort to allow the interviewees words to tell the story.

As noted in the previous chapter, analysis of the data took me off course from my original target. It led me to findings that are broader than the initial scope of the research problem and related questions. Though student perceptions remained at the heart of this inquiry, emerging themes suggested that I pay attention to how the Collegiate Charter Schools have implemented Move On When Ready and the nature of messaging about MOWR the schools have been providing to students. In the end, the data led me to focus on four areas of discovery toward which my claims are oriented: 1) Establishing the gap

in students' awareness of MOWR and the GCD; 2) identifying students' perceptions of college readiness in light of this gap; 3) ascertaining what students believe about their high school experience at Centrum and Atrium; and 4) identifying the actors and message mediators that influence this positioning of perceptions.

Claim #1: CCS Students have limited knowledge of Move On When Ready and the Grand Canton Diploma.

From my earliest interaction with students at the two Collegiate Charter schools, I learned that they were almost universally unaware the Move On When Ready policy existed. In addition, students indicated the Grand Canyon Diploma had not been presented to them as a credential they should actively pursue. On the other hand, they were quite familiar with the term Cambridge, which students used as a catchall phrase to describe the curriculum through which they received instruction and the tests they would be taking at the end of their first and second years of high school.

The first student I spoke with was Iseleta, a grade-nine student at Centrum whose round acned face and bright eyes were capped by a bun of long black hair held in place with a pencil. As she answered my questions graciously and politely though a slight lisp and strong accent, I learned almost immediately that MOWR had not yet become part of her vernacular.

Int: Have you heard of Move On When Ready? Have you heard of that term...
the term Move On When Ready?

Isel: No, I haven't.

At Atrium, I received similar responses. Sitting with a student named Daphne, whose serious expression and locked gaze would ultimately give way to a spunky, relaxed demeanor, I posed the same question.

Int: Have you heard the term Move On When Ready?

Daph: No.

Int: So if I were to ask you to describe in your own words what Move On When Ready is, would you even know what that is?

Daph: By just the name it just sounds like it helps us get ready for the future. That's what I think so far.

Responses that indicated a lack of recognition were nearly universal. Of the fourteen interviewees, only two students identified MOWR as a term with which they had any familiarity prior to our first conversation. However, in these two cases, the recognition remained elusive.

Int: So, [Centrum] is part of a group of schools that are doing something called Move On When Ready. Are you familiar with it?

Maria: Yeah.

Int: In your own words, how would you describe Move On When Ready?

Maria: In my own words, it's... I would say it's a program where it helps people to keep going and to be ready for success.

As Maria and I spoke, she squirmed in her seat. She twisted her jet-black braids with a pair of active hands she used even more frequently to cover a wide, smiling mouth full of braces. She told me her father holds a Master's Degree in Civil Engineering from a

university in Mexico and that her mother works for a bank in a high-rise tower in the downtown area near her school. I pressed her further about her understanding of MOWR.

Int: So how do you find out about Move On When Ready? Where have you heard about it, where is it talked about?

Maria: I found out when I was going to come here. My teachers told me a little bit about it.

Int: Did you know all the things that it means, what you would have to do?

Maria: I didn't.

Int: Do you know now?

Maria: A little bit, but not really.

Amir was the one other student to recognize the term Move On When Ready in the first interview sessions. He had heard second-hand about the student – the young woman from the evening news broadcast – who had graduated early from Atrium and was now attending community college.

Int: So now we're going to move on to this idea of Move On When Ready. In your own words, how would you describe Move On When Ready?

Amir: I'd probably say when you're a junior in high school and if you're ready, you can move on to college, skip the whole 12th grade, if you're able to prove that you're ready.

Int: How do you do that?

Amir: Good grades, a test maybe, and determination.

Int: So do you feel Move On When Ready affecting you at all in your daily life as a student?

Amir: Yeah, maybe when I'm in 11th grade, I might get the chance to go to college.

Int: How about now, is it affecting you at all now?

Amir: No, not yet.

Like most other CCS students, Amir had never heard mention of the Grand Canyon Diploma. A thoughtful and polite young man with a serious face and dark, penetrating eyes, his father and mother had recently moved the family halfway across the country from Iowa. Both of his parents were raised in Lebanon, but had migrated to the United States to attend college. He told me his father owns a Mediterranean restaurant in an upscale area of the metro region. His mother is a computer programmer. From my first conversation with Amir, I took him to be a diligent student with a high regard for academic achievement. He was quite clear about his intention to graduate from high school and enroll in an engineering program at a four-year university, yet he was unsure about how that plan would come together.

The awareness gap between policy framers and policy targets is clear in this case. Without recognition of the policy or any explicit directions regarding how it can be acted upon, it does not seem possible that students could have the wherewithal to explore its implications or possibilities. This presents a potential challenge, not only for students, but for the success of the policy itself. Though I do not necessarily argue it in the case of CCS, it is conceivable that if policy targets are subject to the rules and assumptions of a policy without knowledge of the policy's expectations for behavior, the policy targets' behaviors and attitudes will be in conflict with the policy's intended outcomes.

Claim #2: CCS students attach notions of college readiness to characteristics and achievements that are unrelated to the exams used to assess their preparedness.

This claim is based on statements made nearly all of the students interviewed. It appears that they have only a cursory understanding that their level of readiness will be assessed via a series of formal metrics. Additionally, students voiced only a vague sense of knowing what Cambridge assessments require of them to demonstrate college readiness and did not understand the criteria under which they would be judged (i.e. students were unacquainted with the fact that their readiness would be measured on a scale of qualification scores). While interviewees were keenly aware that they would be assessed in their courses through the Cambridge IGCSE course-aligned exams, it was not clear to them that their scores on these exams would indicate preparedness for college-level academics. In fact, students generally did not know that Cambridge exams were integral components of the Move On When Ready policy. Instead, students were focused on the exams' implications for their immediate future and current course grades.

The MOWR assessment regime is designed to indicate which students have reached a standard of academic preparedness that would allow them to succeed in the first credit bearing course at the community college level without the need for remediation. It is a simple binary. A student who earns the scores on each of the required course-based assessments is deemed college-ready. The student who has not met these criteria is considered not yet ready. Though some of the students intimated they thought the Cambridge examinations could possibly indicate their college readiness, they did not realize that specific scores had been set to empirically define their readiness status. In

fact, without being prompted, none of the students ever mentioned the qualification scores.

Int: Do you know what the qualifying scores are?

Amir: No.

Penelope's responses corroborate the claim.

Int: Usually tests are to determine something. What do you think they're trying to determine?

Pene: Well finals determine if you really know what you're learning about and how much you understand and if they need to re-teach it. And they'll know from our scores as a class if they weren't teaching it well enough or if we can move on.

Int: Are there consequences for not doing well?

Pene: Well here it's if you fail a test it's already at 50 percent, so you don't fail, fail, but you still have time here to retake last year. I mean you shouldn't fail; you probably want to ask the first time so then you don't have to retake or if you wait so long, then if you keep getting tests and test, you have to reteach yourself with the notes you have and try to make it up, which is a lot harder than just passing the first time.

Based on our first conversation, I believed Penelope had a broader understanding of MOWR than most of her peers, yet in her interpretation of readiness exam scores were never mentioned.

Int: What would be your definition of college and career readiness?

Pen: Being able, well you have to make sure you're ready for this huge step into life, because college is basically like what your career is going to be. So you want to be prepared

Comments like Amir's and Penelope's underscore the fact that Centrum and Atrium students do not receive explicit information about the significance of the exam scores relative to MOWR or how they might be used to determine college readiness or within the context of a qualification system (i.e., towards a high school completion credential). Instead, the examinations were viewed by students as something of an accessory to their core academic endeavors. For some, the exams were seen as merely a part of the course grade that would comprise their transcripts.

Int: What about all these exams you're taking? What do you think about them?

Pene: They're very challenging and now in English today we took a practice Cambridge test and you read a passage and they get really deep questions like what was the author's attitude towards the text. And you have to really think about and analyze what they're saying. It's not like multiple choice.

Int: So what's the real difference? Why would you have one test that's so different than another test?

Pene: That's a good question. I feel like with the tests, that gives you more writing wise and multiple choice, it makes you think more on your answer than just having an answer there, 'cause maybe for one of the tests all of the answers are right. We have to explain why we think that, so I feel like these tests give kids, kids think more about the question.

Int: So what score would be an indication that yeah, I got it, I'm good to go?

Pene: Out of ten I feel like I'm at probably a 7 or 8. I understand it, it's just a lot to think about, so it's easier to have one of the answers you know is right, but if it's a question, multiple choice, you have to go back to figuring out the answer.

Int: And so when you take these exams and you get an A-star or a D or a G or B, what do they mean? What do those grades mean?

Pene: How they explain it is that A-star is exceeding expectations, beyond, it's if you get a 97 or above. An A is a 96 and a 90 and B is just like stuff like that. So they really expect us to be hitting that A-star, something like that, 100%.

Int: How realistic is that?

Pene: Well I feel like they shouldn't, well I think I'll expect the A-stars as good, but it's really hard to get that A-star, 'cause even some of the kids here who are really smart, they don't always get A-stars, but that doesn't mean they're not, they'll still get A's but it's really challenging. It's like a huge challenge for us students to work our way up to get 100% on every test.

Another group of students indicated they thought meeting the qualification score would help them get into college or possibly earn a scholarship. At Atrium, Daphne weaved this perception into her thoughts on college and career readiness. Within the first few minutes of meeting Daphne in the conference room at Atrium, I could tell that she was a serious and focused student. Spunky and good-natured, she simultaneously displayed maturity and playful youthfulness. Wearing baggy khaki cargo shorts held up with a rope belt and shin-high combat boots, her unblinking eyes remained in contact with mine. She told me she had taken honors math at her neighborhood middle school

before enrolling at CCS. She also mentioned that she felt (and had been told by one of the Atrium teachers) that American education was not on par with the rest of the world. She believed this was one of the reasons CCS had implemented the Cambridge curriculum.

Daphne's perception of college readiness had evolved only slightly in the months leading up to our second conversation. That perception remained untied to the Cambridge IGCSE exams.

Int: What would your definition of college and career readiness be?

Daph: Be academically suitable, I guess.

Int: What would you have to do to show that you were academically suitable?

Daph: Like having a high school diploma maybe would help. Just like being able to do the work and determination to get it done.

Int: How would you show that you are able to do the work?

Daph: Not give up easily.

Int: So what do you have to do to make sure that you are eligible to go [to college]?

Daph: Keep my grades up high, maybe do some extracurricular activities where I can try to get scholarships. I think it's just maintain a good grade in school.

Int: What roles do the Cambridge exams play in that?

Daph: I think it will go towards international schools around the world, so that could help us more.

I saw no discernable deviation from this theme at Centrum. Iseleta's responses are indicative of the larger groups' impressions.

Int: What is your definition of being prepared for college?

Isel: You know like, like having a good understanding of your education.

Like, it's ... (pause)... having a good resume I guess? For college.

An interview with another Centrum student named Daniel epitomizes the general perception of students on that campus.

Int: So what are you preparing for now?

Dan: Cambridge, they're getting us ready, like giving us the type of questions we're going to see on the test and they're making us practice answering them and strategies to answer them.

Int: What does it mean to take the tests? What do the results of the test mean to you?

Dan: Well it means that basically I just want to do good on it because if I do, it'll show up on a lot of places, so I want to do good on it, so I can give it a chance and just keep a good grade to have a good future.

This was the second of my two interviews with Daniel. His appearance had changed significantly since our first meeting. His hair was cropped to reveal a pair or largish ears and long, thick eyelashes he had previously hidden behind a swooshing black mop of thin, greasy hair. Daniel wore a *Santa Maria de Guadalupe* pendant and folk-art cross around his neck. He had been exceptionally shy in our first encounter, greeting me with a soft, limp handshake. By the end of our conversation he was flashing his braces amidst warm smiles. Speaking out of the corner of his mouth, he appeared to smirk as he talked.

Int: Do you look at Cambridge any differently now than you did when we talked last time?

Dan: Yeah, now I take it more serious because at first I thought it was just a test. And now I like to prepare, they're giving us questions almost every day. And the teachers keep on going "Cambridge is coming up", you know. And giving us questions, "well you're going to see this in Cambridge" and just a lot. So now I feel like it's more of a big deal than I thought it was once.

Int: What does it mean if you meet the qualification score, what does that do for you?

Dan: I was told that it matters in your senior year. So like taking it this year, sophomore and junior year, it matters, but not as much as it does in the senior year.

Int: What'll it mean to you if you don't meet the qualification score?

Dan: Well I would feel like I'm not prepared for the next test or like I need more help in school. Because Cambridge, well they're basically preparing you, so if you didn't do good, that means they didn't prepare you right or you didn't learn something right or you didn't understand a certain subject or a certain thing that was on the test.

Rudi was similarly unable to connect the Cambridge exams to the college readiness binary. A garrulous, extroverted young man, Rudi sauntered into the conference room for our first interview. He was small and wiry with neatly pressed khakis and an Atrium sweatshirt that looked a size too small. He had a thin, gaunt face and dark, pin-dot brown eyes. He sported a pixie haircut. Rudi's long, rambling answers to my questions

often leapt from topic to topic. In this meeting, he revealed his confusion about the exams used in MOWR.

Int: Has there been any talk about how Cambridge and the tests fit with Move On When Ready?

Rudi: I never really have taken the Move On When Ready test, but I just seen the Cambridge, so it was like okay this is how this test is. And then I would have to see the Move On When Ready one just to like, “Oh, this one’s probably more advanced than this one. And then this one will probably give more info than this one or description and more facts, kind of giving it more of the why should you be doing this...” and Cambridge is the same thing, but more advanced, different wording.

Int: So, are Cambridge tests and the Move On When Ready tests different?

Rudi: Yeah.

We continued.

Int: Have you heard this term college and career readiness?

Rudi: No, I haven’t heard anybody talk about that one.

Int: If I were to say that term to you, how would you define it? What would it mean to be ready for college and career?

Rudi: It’s kinda sounds like, to me it sounds like the question is the same. Are you ready for college and you answer the question.

Int: What would it take to be ready?

Rudi: Probably a lot of motivation to see what you’re into. If you’re into technology and you want to invent something, you’d really start going for it, try

and go for that goal. And if people wanted to learn more about what happened to this culture and now they're just kind of starting to disappear and want to learn more about their history. And they start talking to the people, so I kind of understand it a little.

Int: Do you think that your school being involved in Move On When Ready affects your path toward college and career?

Rudi: It probably does, 'cause they start to talk about like in college this is not going to be easy, they're not going to give you a second chance, once you take the test, that's it, you can't retake it, you can't be cheating on it or you get kicked out. Like plagiarism. And then like homework, you'd be doing a lot of reading and writing and a lot of, just mainly those two, that's what I heard from these teachers that are in the school. That's about it, that's how the school relates.

During our second interview I queried Rudi as to whether he could equate Cambridge to college readiness. He could not.

Int: And how much of what you've learned is going to be important for what you do next? How will what you have learned about science and history and math and all of that, how will all of that help you for what comes next?

Rudi: It'll help me from just kind of taking a step when you know so much, like okay, let's go one step up, let's see what I can see over the hill. Like going walking up a hill and you know so much what's over there, why not look, why not take the big test and see what happens.

Int: And is there anything at stake? What's the stake if you hit all the qualification scores and what's the stake if you don't?

Rudi: If you don't, then you'll be sitting, or you can do it again, over and over again, to see if you have it right, study hard and learn more, do more research, wait for next year and then go again.

Int: Why would you do that?

Rudi: I would do it because it'll help me more to getting a better job from kind of just walking down and going into McDonald's, okay I can get this job. Okay, and just like you're in, when you want to do something bigger, when you want to be a teacher. Okay, if I don't get this right, I'll wait for next year, I'll study harder next year.

Rudi was technically correct. If he did not meet qualification scores, he could re-sit for the exams as many times as needed to succeed. However, his notion of re-testing simply to show 'you have it right' suggests the discontinuity between consideration of the tests as an indication of course-related proficiency and using the tests as a reflection of readiness to advance to the next level of education. On the whole, students' emphasis on CCR's curriculum (i.e., Cambridge) rather than the qualification system model is another clear sign that the premise on which MOWR was built did not factor in students' conceptions of how they might demonstrate college readiness.

Claim #3: In effect, CCS Students receive no messaging (from any source) about Move On When Ready or the Grand Canyon Diploma's utility or potential implications for college going. Students who are aware of the policy perceive that MOWR's primary design feature promotes early graduation for high school.

Student responses suggested that the CCS schools do not explicitly emphasize Move On When Ready. The extent to which the policy fits within the schools' designs,

systems and activities is unknown to students. As the number of interviews mounted, so too did evidence suggesting the CCS sites were communicating only *some* elements of the MOWR policy and that, essentially, the schools were not promoting the full qualification structure. In other words, it became apparent that MOWR is not the primary organizing principle for CCS schools.

While both sites have adopted the curricular aspects and testing schemes of the Cambridge IGCSE instructional design, students were not explicitly told of how the curriculum and tests might be used as a measure of their college readiness or how their scores related to the potential for earning a Grand Canyon Diploma. It was unknown to students that, under the model, they could be asked to remain in a course until they had achieved qualification before promotion to a higher-level course beyond IGCSE.

The data also indicate there is a common misperception among CCS students that MOWR is geared toward early graduation. This perception remained constant among interviewees from the early months of the students' first year of high school through April of their freshman year. Few students had gained any real familiarity with the Grand Canyon Diploma by the time I conducted my second round of interviews with them.

Amir provides a good example. Between our first and second interview sessions, Amir's recognition of MOWR had improved, but only slightly. Further, his perception about MOWR being a mechanism for early graduation remained.

Int: Do you remember what we talked about?

Amir: Yeah, Move On When Ready.

Int: Okay, what is that?

Amir: It's like a thing you can do to move on if you feel that you're ready to go.

Int: Where did you hear that?

Amir: You told me about it.

Int: Has anybody else talked to you about it?

Amir: No.

Int: None of the teachers.

Amir: Yeah, our English teacher mentioned it.

Int: Your English teacher did?

Amir: Yeah.

Int: What did she say?

Amir: She just said if you get qualified sort of for Cambridge you can move on to community college.

A classmate of Amir at Atrium responded similarly. During our first interview, Penelope had greeted me with a flat expression and a tight-lipped smile that seemed as if she were trying to hide her mouth full of braces. She wore her hair in a ponytail pulled back by a thin headband. Her pale, acned face was brushed with light makeup. In her ears she wore a pair of large diamond stud earrings. She appeared fidgety, squirming a bit and tugging at her short fingernails. She stared down at her Chuck Taylor high-top sneakers. At the time of our second interview, her demeanor and appearance had changed considerably. She was no longer a timid freshman. During this session, she was quiet but communicative. She maintained direct eye contact and spoke with candor and ease. She wore her hair down around her shoulders and her face was unadorned.

Int: Last time I asked you if you had heard of something called Move On When Ready and I'll ask you again, have you heard of anything called Move On When Ready?

Pene: Not really, they don't really explain it that well. I heard it from one friend before.

Int: What did you hear?

Pene: That I think it's when you take this test here and then if you pass it, you're able to end high school early or something.

Int: What test would that be?

Pene: I think it's like the Cambridge one, but I'm not positive on it. I know if we pass, like [our Principal] was saying that if we do pass this Cambridge test, that we do get credits for college she was saying. So I would think if you pass it, you could be ending high school earlier, but I'm not... She hasn't personally for me, said Move On When Ready is this.

Int: Have you heard of something called the Grand Canyon Diploma?

Pene: I mean she's mentioned it, but not in detail, so I don't know much about it.

Int: You don't know what you need to do to earn one?

Pene: Probably pass the class; she hasn't really explained what you need to get it.

In order to explore the school leaders' thoughts on the claim that students perceived MOWR primarily as an early graduation pathway, I interviewed Ms. Bell, CCS's Chief Academic Officer. Ms. Bell had come to CSS from a large public urban high school district when the schools first opened their doors. When Centrum and Atrium

were in the process of selecting curriculum and developing the school's instructional designs, she was responsible for the decision to adopt the Cambridge IGCSE system and implement MOWR at the CCS sites. In her role, she functions as the school leader most responsible for facilitating implementation of the MOWR policy.

Int.: So, relative to students' perceptions of Move On When Ready as a policy or as an initiative, what questions or concerns might you have around that?

Barb: I don't think our students know that there's a policy around Move On When Ready. I think some of them are aware that they can earn a Grand Canyon Diploma, but that's not necessarily their goal. I think what they will tell you is, "oh yeah, we know we can do that, but we want to be in high school, we want to get credits for college." I think in terms of their general awareness of what the policy is, of what the impetus for it is, I don't know that they're that savvy about it. They know that they're taking Cambridge, they know that it's a rigorous curriculum, they know that they're being prepared for college, but beyond that, I don't know that they would know Move On When Ready, I don't know that they would know, I would guess that 70 percent of the kids don't even know what Move On When Ready or Grand Canyon Diploma is.

Int: Is that at all problematic?

Barb: Not for our goal, because our goal isn't to get them out at tenth grade. Our goal is to make sure that they truly are ready for success at the university level and we believe that that's in part passing Cambridge IGCSE, but we also believe it's being successful in A and AS level courses. So for us, creating the systems that allow for every student to a) master IGCSE, and then eventually to be on to

master the A or AS level courses, that's our ultimate goal in terms of that success in college.

Ms. Bell's statement regarding the potential for students to leave school after tenth grade was surprising. Over the course of the previous three years in my job, I had been present for several conversations with her in which it was clear she did not believe the policy was intended to promote early graduation. Hearing her isolate that particular pathway in a manner reminiscent of student responses suggests that early graduation is widely thought to be an outcome the policy's framers sought to promote when designing the model. If this is the case, it might explain why CCS had chosen to deemphasize communications with students about the Grand Canyon Diploma.

I investigated further into whether the 'move on' aspect of MOWR was overshadowing the other pathways options. I queried Ms. Apple, the Principal at Atrium, about what MOWR meant to her.

Ms. Apple: I've talked to the families to know they're interested in Move On When Ready or what their ultimate goals would be. Since we're a small enough school, that's something that I have the opportunity to do quite often with families.

Inter: So in your own words, how would you describe Move On When Ready as an initiative?

Ms. Apple: I say it's something that really hasn't impacted our students because very few of our students are interested in moving on to a community college at grade school. That's been, I think, the biggest barrier from more of our students going with the Move On When Ready. I think if they could move on to

university, knowing our families and how educated our families are, they do have, I think there's a stigma attached to a community college, you know, rightfully so or not, that our families have though.

Inter: So if somebody asked you to describe the initiative and they'd never heard of it before and they said, what is Move On When Ready?

Ms. Apple: I'd say there are different pathways that have been created to personalize a program for students, both secondary and post-secondary. We have the STEM diploma as one aspect, we have the Move On When Ready meaning you're ready to leave high school and move on to a trade school, community college earlier and then advance past that. One of the reasons that we're part of it is to bring in the rigor of the curriculum and have our students exposed to college level curriculum while in high school.

Ms. Apple's comments were additional confirmation that students were not the only people in the building with a more narrow perception of MOWR than the framers of the policy had hoped. The message was not getting through to all CCS stakeholders that the model was designed to ensure students are college ready and that multiple pathways were available to them once readiness had been established.

Claim # 4: Despite not being able to articulate the link between assessment and certification of college readiness, CCS students generally trust that they are being adequately prepared for college.

College readiness is a term with which every student I interviewed was familiar. Though most had trouble articulating its relation to Move On When Ready, the Grand Canyon Diploma, or Cambridge exams, every student could, at the very least, formulate

an opinion about what they thought the term meant. Students often projected themselves into a situation in the future where they would be called upon to exercise skills learned at CCS.

Int: Is there anything that you can think of that would help make [Centrum] better, like in terms of your education?

Ver: Well nothing comes to mind right now, 'cause I'm pretty satisfied where I am. I think it's a really fun environment. Like the learning can be challenging, but they make it fun at the same time. And it grabs my attention that they're able to teach it differently from my old school because like here we are taught to explain things, to analyze things and I think that's just a really good experience.

Int: Why do you think that's important?

Ver: Well it's going to help you in your future life. You're eventually going to have to explain and analyze things, not just like oh tell what it is. You just have to be able to put it into your own experience.

In particular, students stated they believed CCS was explicitly preparing them to be successful in college. Many attributed the preparation to their work in Cambridge courses. As Paulo's comments suggest, this was the common sentiment voiced by students at both schools.

Paulo: Most schools they just help you to finish high school, but this school in particular helps you get into college.

Int: How do they do that?

Paulo: Cambridge.

When Paulo walked in the door for our first interview, I noted that he was rail thin and tall. His backpack was stuffed so full that I wondered if it might topple him at any moment. Coupled with his thick-lensed glasses, he carried the appearance of a scholar. As our conversation drew on, it became clear that he had given thought to the work he was doing at CCS.

Int: What is it about Cambridge that does that versus what happens at [your neighborhood high school]?

Paulo: Well with [the neighborhood high school], you just take your AIMS and SATs at the end and here you take all those and plus Cambridge. So that's kind of, and it's a diploma that can help you into schools better... if the college accepts the Cambridge curriculum.

Int: What do you think is better about the Cambridge exams than AIMS or the SATs or ACTs?

Paulo: I guess better for getting into college.

Int: Why do you think?

Paulo: One of the teachers explained it, but I don't remember. She said something that the Cambridge is like getting globally known around the world and more colleges are going to use it. And so most schools don't use Cambridge curriculum and this one does. At [the neighborhood high school] they don't.

Int: Why do you think it's becoming more popular?

Paulo: I guess they're starting to see it as an opportunity for kids to get in easier. Like Paulo, other CCS students suggested that they understood college was a key stop on their educational journeys. They felt CSS was going to get them there.

Int: So, you said that you want to be ready for college.

Isel: Yea.

Int: And that this school is going to prepare you for college.

Isel: Yea.

I found that students most often spoke about being ready to succeed college from the perspective of passive actors. That is, their responses suggested that it was the responsibility of their schools rather than their own efforts that would result in their preparation for postsecondary work. Penelope expressed this about her Atrium experience..

Int: How would you know if you're prepared [for college]?

Pen: I feel like since they, how they're getting us ready, I feel like how they're moving us now, I think we'll be ready before we're actually there. So by them making us have a college experience in high school and getting us ready, I hope that once I actually get into college it'll be a lot like high school.

Daniel offered his perspective from Centrum.

Dan: What this school does is it not just teaches you what you need to learn, but it also prepares you for college and university. And what they told me recently was once you graduate from high school and you move on to college, your teachers will still be in contact with you and making sure you're still doing, just keep in contact with you if you need anything or just to make sure you're on track, because they don't want you to go down.

None of the students at either CSS school spoke explicitly about being ready for college level work by the end of their first year of high school. The data indicate it would

have been surprising to find that perception among the students considering their general lack of awareness about the college readiness binary in MOWR. However, each of the students would sit for exams less than a month after this study's second round of interviews. Under the qualifications system model, the results of those exams would be used to evaluate their progress toward college readiness benchmarks.

Exam Performance in Relation to College Readiness Benchmarks. The qualification scores recommended by the NCEE Technical Advisory Committee and adopted by the Arizona State Board of Education are based on a Percentage Uniform Mark (PUM) calculated by Cambridge International Examinations. A PUM score is the conversion of the weighted marks earned on an IGCSE exam to a standard grade scale. Letter grades ranging from A* (A-star) to G are assigned to corresponding PUM scores in descending order from highest to lowest. Grade bands are delineated by intervals of ten PUM (i.e. an A* ranges from 90 to 100 PUM, an A from 80 to 90, a B from 70 to 80, etc.). A grade of U indicates a student did not earn enough marks on the exam to make it on to the grade scale. An X is reserved for a student who was registered for an exam but did not submit one or more of the exam's components for grading. As detailed in the first section of this paper, the Arizona State Board of Education has adopted qualification scores that students need to earn in order to fulfill the requirements for the Grand Canyon Diploma. By the state's definition, achieving these qualification scores certify a student's college and career readiness in that subject area.

Each of the fourteen students interviewed for this study sat for at least one Cambridge IGCSE examination in the spring of 2014. Most sat for exams in the two

IGCSE courses they completed in their first year of high school (First Language English and World History).

Table 4

Qualification scores for Cambridge IGCSE exams

IGCSE Course	PUM Score Required for GCD
IGCSE English First Language (FLE)	70
IGCSE English Literature	65
IGCSE Mathematics	65
IGCSE Biology	60
IGCSE Chemistry	60
IGCSE Coordinated Sciences	60
IGCSE American History	60
IGCSE World History	60

Exams in **bold** print indicate course-aligned study participants took during the spring 2014 exam session

Two of the students (both from Centrum) also took the mathematics exam after completing the course in grade nine. The vast majority of Move On When Ready students across the state take IGCSE Maths exam (Cambridge uses the term “maths” as a plural) after completing the course in their second year of high school, as the exam is the summative assessment for a two-year integrated mathematics course.

The table of all exams taken by the sample group (below) shows that six of 14 exams met the college readiness qualification threshold in IGCSE World History (all but one of these qualifying exams came from Atrium students), two of 14 exams in IGCSE First Language English reached the qualification score, and one exam out of two met qualification in IGCSE Maths. One student reached the college readiness qualification in all three exams she took (Veronica) and another (Megan) met in the two exams for which

she sat. I hadn't realized how academically capable these two students were until examining their Cambridge IGCSE exam scores several months after our second interviews. Their responses did not reflect any distinct difference from comments I had received from their classmates, nor did they suggest any greater or lesser likelihood they would be successful on the exams.

Table 5

Cambridge IGCSE Exam results: Spring 2014

Centrum Student Name (Alphabetical order)	FLE Grade/ PUM Score	World History Grade/ PUM Score	Math Grade/ PUM Score	Atrium Student Name (Alphabetical order)	FLE Grade/ PUM Score	World History Grade/ PUM Score	Math Grade/ PUM Score
Daniel	U / --	E / 40		Amir	D / 58	C / 68	
Iseleta	D / 50	F / 32		Daphne	C / 64	C / 64	
Jose	U / --	E / 46		Megan	B / 76	B / 70	
Maria	C / 62	E / 40		Omar	C / 66	B / 75	
Minerva	E / 40	E / 49		Penelope	C / 65	C / 60	
Paulo*	E / 46	D / 55	U / --	Rudi	U / --	X / --	
Veronica	B / 78	A / 81	A / 81	Ryan	E / 48	E / 40	

*Paulo also sat for the IGCSE Coordinated Sciences examination. Coordinated Sciences is a two-year science course covering topics in biology, chemistry, and physics, which students ordinarily take after their second year in high school. Paulo scored EE (two letters for the two year course)/ 46 on that exam.

At first glance the table shows that Atrium students performed significantly better on the exams than Centrum students. It is interesting to note that four of the five students at Atrium who met qualification in World History earned scores that approached the college readiness qualification score in IGCSE First Language English. Overall though, relatively few exams returned scores that met the qualification score (9 of 31, or 29 percent). However, caution should be exercised when reviewing these data, as it would be

unfair to draw any firm conclusions from such a small sample size. Irrespective of sample size, MOWR's college readiness binary classifies nearly all of study's participants as falling short of being ready to succeed in college in at least one subject area.

Claim #5: Collegiate Charter School Students at both schools believe CCS delivers an academically rigorous education that would not be available at public district schools. These perceptions have been shaped by the students' personal experiences and messages conveyed by message mediators, including practitioners, family members, schoolmates, and out-of-school peers.

Collegiate Charter School students perceive they benefit academically from the affiliation between their school and a major research university. Additionally, students believe the schools' charter status somehow makes their schools more academically elite. In the students' minds, these two factors express much of the schools' identities. This sense has transferred to the students, who have embraced CCS's reputation in the community. Much of the messaging that reinforces these elevated notions of value stem from interaction with peers who do not attend the schools. Students also report that attitudes of family members coalesce around the notion that CCS provides a superior education to the schools in which they were last enrolled or schools in which they would be enrolled if they were to attend neighborhood public schools.

For students like Omar, the decision to attend CCS was grounded in parents' desires to place their children in a more challenging academic environment. He noted that both of his parents are college graduates with a keen interest in the education of their children. Omar insinuated that his mother, a psychology professor at a local community college, was the primary driver of the academic emphasis in his home.

Int: So you think your mom did some research on Move On When Ready.

How well do you think your folks understand what Move On When Ready is?

Omar: I know that my mom is the top person that always likes to get as much research as she can on stuff, so I think she probably has a very good understanding of it.

Int: What do they think about this school?

Omar: They feel like it's a very good school and my mom knows that me and my brother are very smart, so she thinks it meets the expectations of me and my brother and that it's not too easy, because that's what she felt about [my neighborhood public] High School, that it was just like a school that you just go to just to go to high school. So she feels that it's very rigorous and that the Cambridge tests and stuff like that... that they're going to help us improve and be more likely to get into a good college.

Omar's round face and easy smile portrayed an air of joviality, though I found him to be a more serious young man than his appearance first hinted. His demeanor was pleasant, but he maintained a formal posture and spoke in measured phrases throughout our two interview sessions. He often glanced away as he spoke, looking slightly uncomfortable as he shifted his big frame under him. Omar told me he was the youngest of three siblings, that his brother was also enrolled at Atrium in a grade above him and that his sister, who had graduated from his neighborhood public high school, was now attending a four-year university.

Int: So your sister spent four years at [your neighborhood public high school], your brother spent two years at [your neighborhood public high school], but they said that's not for you, and they just thought it was too easy?

Omar: Yeah 'cause my brother and my sister think that with the amount of people there, it was kind of distracting and you don't get as much attention at [my neighborhood High School] as you do here. So it was a little bit, not overwhelming in the fact that it's more rigorous, but overwhelming in the fact that it's kind of too congested there. You can't get help with stuff you need 'cause everybody else is trying to get help.

Int: So your brother was there for two years and now he's here. What does he think about it?

Omar: I think he likes the change 'cause he can get, in English he was struggling a lot, but now he's doing a little bit better. So now he's not being dragged on like he was at [my neighborhood high school].

Int: What do you mean by dragged on?

Omar: Before he was able to get help, but the teachers weren't willing to give him that much help because they thought he was just a number and there was so many other kids that needed help.

Nearly all of the students at the CCS campuses mentioned they felt able to rely on teachers for extra support. They cited the ability to work with faculty before and after school and during an academic support class called Learning Lab. Their comments suggested the school had cultivated a culture of caring, which the students believed was missing in other schools they had attended.

During an interview at Centrum with a young man named Jose, I heard a similar comment. The least communicative of all the interview subjects, Jose stood out because of his reserve and shyness compared with the other students I had met. I wrote a memo while he scanned the informed consent form, which read, “Quick reader (or maybe not reading at all).” It was hard to tell. Jose spoke in a high-pitched voice that matched his young-looking face and bowl haircut. The first day we met, it was about 55 degrees and rainy outside. Other students wore warm clothing. Jose was dressed khaki shorts, a t-shirt, and a pair of muddy tennis shoes that made him look cold and vulnerable inside the conference room.

Int: So do you like school?

Jose: Yeah, it’s really interesting.

Int: Is it a lot different than your old school?

Jose: Yeah.

Int: How so?

Jose: Because right in this school they help us like more. The teachers really get into our business, like they really help us. In the other school too, but in this school, teachers are more involved in our school.

That was about as expressive a statement as I was able to pull from Jose. After each of the two interview sessions I had with him, I jotted down a single word to punctuate the event: “Painful.” I doubted any of his clipped responses would make it into these findings. Perhaps the reason I was left with such vivid recollections of my conversations with Jose was because the other interviews with CSS students stood in such sharp relief. In my job, I have spent many hours in classrooms and schoolyards

talking and listening to high school students. From my perspective, the poise, courtesy, and maturity displayed by the vast majority of CCS students interviewed for this study was notable. Veronica is an excellent example of CCS students' deportment. She was a quiet thinker who made a habit of pausing for a beat before answering my questions. She was friendly and relaxed.

Int: Looking at the way that things are done here versus the way things may be done some other places... how's it working for you?

Ver: I am actually getting accustomed to it. I really like how they're just putting us into the mindset, like this is hard work, but it's going to pay off because in college you're just going to be used to being responsible for it.

Int: What was the adjustment that you had to make?

Ver: Here I was really challenged on harder lessons, they're really requiring you to think, not just like answer, but be able to understand and analyze things.

Int: Why is that important?

Ver: It's important because it allows you to think deeply about things, just basically being smart about things, being able to analyze.

It is clear that the students I interviewed at CCS were getting the message that their schools offered something extra in the area of academics. They were hearing it from home and in school. Students also reported that their out-of-school peers regarded the schools favorably. Daniel had told me during our first interview that he spent time outside of school with friends who did not attend Centrum. During our second session, I asked him if he had any more thoughts about their impressions of his school.

Dan: Just the same, whenever they hear [the Charter holding University], they think it's a smart school or a private school or just a school with money or a smart school, that's what they always say. It means you're smart, or something like that. And when I look at their school, I think this is much better. Even though their school has a bigger campus, more students, more teachers, more classrooms, I think one is better because this one gives you Cambridge without paying for it. It automatically has Cambridge. They have really good teachers too here, because in other high schools it's basically if you don't get the subject, you're on your own. But here they offer time before school, after school and through email to help you, even with your homework. You can just email them and they'll help you out. Or you can stay after school.

Int: So you feel like you're getting a lot of support from the teachers.

Dan: Yeah.

Ryan, a slight young man with sharp features and pale blue eyes shared similar thoughts as we talked in the conference room at Atrium for the first time. His spiked dishwater blond hair sat atop his smallish head and he smiled while listening to my questions. He maintained constant eye contact through a pair of thick-rimmed glasses as he spoke with a surprisingly gruff and deep voice.

Int: Anything different between this school and [your previous] school?

Ryan: It's barely different but the teachers they realize what's most important for you here. 'Cause my teachers last year, they were nice and stuff, but they weren't as strict as these teachers here, teaching you what you need to know to be ready for your Cambridge tests, your Galileo and everything.

Later in the interview I asked Ryan what his friends who didn't go to CCS thought about his school.

Ryan: A lot of kids think it's cool. They like it a lot. They especially think it's way different than like public schools of course, so they're like this is a big opportunity for you.

Int: I'm curious why you say that, "of course."

Ryan: I think what they mean by is I like to learn more and get in depth and get ready for college before kids at public school.

Int: Why do you think that is?

Ryan: I just think they have a stronger, they want you to learn more and they have a base where they want you to succeed and to get to a higher level. So I just, I kinda know, but it's kinda like difficult to understand at times.

Int: What do you know about their schools?

Ryan: I hear that the teachers just like, here's the work, get it done, get it to me by next Tuesday or something. And I don't really like that 'cause you're not really learning anything. And say like if you do already know this and they, you're know, I just did something like this and I already grasped it. And I just think they don't get the attention and what they really need like we're getting at this school

Two unmistakable themes continued to surface as the number of interviews increased; 1) that CSS campuses are 'smart schools;' and 2) teachers are consistently available to support students. Penelope echoed the first theme.

Int: How would you know if you're prepared [for college]?

Pen: I feel like since they, how they're getting us ready, I feel like how they're moving us now, I think we'll be ready before we're actually there. So by them making us have a college experience in high school and getting us ready, I hope that once I actually get into college it'll be a lot like high school.

Maria confirmed the second.

Int: Are these teachers different than teachers that you've had in the past?

Maria: Yes, definitely.

Int: What's the biggest difference?

Maria: The extra help. They're not, you either get it in this class period or you don't, it's kind of like that. And in this school I like how you can call for help or just take your responsibility to do so.

Int: What about the kind of work that you're doing, are you doing different kind of work here?

Maria: Yeah, the level academically was very different over there than here, so I have to jump from lower levels, but I'm doing good.

A few of the student responses suggested that they felt CCS schools were safer than neighborhood public schools. This attitude surfaced in five of the 28 interviews I conducted with students (three at Centrum and two at Atrium). The concerns centered on students' suspicions that bullying and fighting in other schools was more prevalent than on their campuses. Though an interesting finding and perhaps worth a footnote to this claim, I do not estimate it to be a universal perception among students.

In an attempt to differentiate the attitudes of students from one campus with those of the other, I asked each of the students about their impressions of the students at the

CCS campus they did not attend. Expecting I might hear students make generalizations about the populations at the other schools, I was surprised that no students thought they were markedly different than their peers at the sibling CCS school. This was one of the strongest indications that students' perceptions of their schooling experiences did not differ significantly from one campus to the other.

Claim #6: Comparing students' perceptions of Move On When Ready, the Grand Canyon Diploma and college readiness between CCS schools, the data show only subtle differences distinguish Atrium's students from Centrum's. However, CCS school leaders perceive significant differences between the two groups, particularly regarding parents' notions about their children and their schools.

Throughout the interview sessions, I had tried to get students to discuss their relationships to their ethnic ancestry, heritage, and family situations in an attempt to gauge if distinctions across and between students emerged. I was only minimally successful. At Centrum, Maria had mentioned her parents' Mexican ancestry but I could draw no connection between that recognition and her outlook on schooling, life after college, or career. Iseleta had noted that she felt different than her Mexican born mother, "Because I think she was raised in a different culture. Like Mexican culture. Like you know how it is? Like how they raised them back then? Like it was so quiet and everything." It seemed to go no deeper than that. For Rudi over at Atrium, however, heritage exerted a stronger influence. He had made mention of "disappearing culture" in our first interview, which indicated that he maintained a strong sense of social location few of the other students had portrayed. From his statements it became clear that Rudi

was cognizant of his Native American heritage and that it played a role in his worldview. When I asked him to tell me about himself, he replied, “I’m into my Navajo culture, really traditional, sometimes around my school I usually wear my moccasins and start walking around.”

Interactions with his Native American “clan,” experience growing up in a blended household with his “Auntie” and mother, brothers, cousins (who called each other brother and sister), and his family's economic struggles appeared to weigh on his responses. When I asked Rudi what he thought it meant to be college ready he weaved considerations of money and career throughout many of his comments. For example, he said,

I think meaning like save a lot of money so that you get books, or save a lot of money to do extra things that you might need like a car, maybe food, things that are small that can probably help you in life.

Rudi's sense that there was more to readiness than academic performance alone was unique among the interviewees. The other students had mostly spoken of studying hard, completing assignments, and other academic behaviors. Students' comments did not suggest that their social or cultural experiences outside of school (at home or with peers) play significant roles in their perceptions of college readiness. To them, the culture of their schools and their experiences in those schools were far more influential.

Consistent with a portion of the research literature, the data indicate that the college-going culture and academic ethos of CSS schools drive students' belief systems around their likelihood of attending a postsecondary institution. Indicating that the college-going culture at CCS Centrum is strong, study participants unanimously believe

they will attend college after graduating from high school. These students often mentioned faculty and staff as having provided emphasis on the value of college. My interview with Ms. Bell seemed to confirm this.

I think staff's role is largely to maintain our mission and as you know, we're very mission-driven. So for us, it's that success in college. So we can never lose sight of what does it mean to be successful in college, so it's having those conversations about what are the salient features of a success college student?

What are we doing day in and day out in our classrooms to build those behaviors in our students, to build that academic knowledge? How are we, to constantly be revisiting our program, just as I described earlier, how are we building a thoughtful system that gets us to the end goal? ... So those are the kinds of things where it's in part talking to the teachers and the families and the students, because the students have to buy into it, to be able to say these are the opportunities that we're providing for you, but at the end of the day, it's based on how you perform that gets you this credit or that moves you to this place.

According to Ms. Bell, Centrum staff has embraced the messenger role. Ms. Bell believed that in certain respects Centrum staff had taken on a custodial role for students' education.

For [Centrum], our parents here truly depend on us to give their children the best. They are entrusting us totally, which is a different set of responsibilities because then you want to make sure that what you tell the parents is actually what's going to be true. So when we say your child needs to re-sit for this [exam] because they didn't do this, the parents trust us and okay no, that's no problem, just make sure

my child is learning, just make sure my child can go to university. So for [Collegiate Charter School Centrum], it's about providing the opportunity and then making sure that the students do in fact have that, and we have to be, in some ways, the academic parent of the children because the parents don't have that background, don't have those experiences, and they're looking to us to be the academic parent.

For students at Atrium, the opposite was true. Both Ms. Bell and Ms. Apple felt strongly that it was the schools' parents who were driving students to attend college. Citing a stark contrast to Centrum' population, Ms. Apple held that the belief that Atrium students had been raised with the expectation they would receive a postsecondary education.

Many of our [Atrium] students are not going to be first generation college students; their parents are college educated. And I think that probably is the key because I think the majority of our students at [Centrum], they will be first generation college-going students. So for them it's a bigger deal. It may not seem as real. Their parents need more help along the way and support along the way through the entire application process. Getting through high school, this is what it looks like. They probably need more support than our [Atrium] parents do, 'cause our parents, having already gone down that route, they know about college requirements, they know how important those GPAs are, they know about, they know what a FASFA is. Not all of our parents, but I think we have a greater majority of parents that are already there. But that in turn is an expectation that the students have internalized because from the time they've been born, they've been told they're going to college. So for them it's just a given

whereas I think some of our [Centrum] students, it wasn't an option until they joined our school, and then there's, 'Oh I could go there.'

By Ms. Bell's reckoning, the intense family influence on Atrium students carried some downside.

At [Atrium] it's interesting because I think in some ways, the job of getting the [Atrium] kids to the PUM score is easier and they have again, that pressure from the parents of I want my child to have fun, I want my child's GPA to be higher, I want... So parents are complaining about the GPAs and then they get their ACT and their SAT scores, and they go. "See? We're telling you, our children are brilliant and you're giving them bad GPAs and they're not going to get into the colleges of their choices and you're making them take that damn test again."

Despite school leader's strong feelings that parental influence was key in one school and staff influence was strongest in the other, the interview data did not suggest such a distinction. Students at Atrium and Centrum cited influences at similar rates. At both schools, student responses suggested they were more attentive to school-based messaging than to family mediators more frequently (though only slightly). I could not identify a significant difference between the two school sites.

Summary of Findings

One of the more unexpected discoveries to come from analyses of transcript data is the relative homogeneity of students' responses. This likely speaks to a congruity of school design and instructional practice found on both Collegiate Charter School high school campuses (and perhaps in CCS primary and middle schools as well). That is, organization and delivery of schooling are generally the same at Centrum as at Atrium. In

addition, the messages students receive about Move On When Ready, the Grand Canyon Diploma, and college readiness flow through similar filters and in similar proportion. The overall volume of messaging, however, is quite low, as evidenced by the fact that interviewees appear to have little to no access to well-informed conceptions of MOWR or the GCD.

Emphasis on elements *related* to MOWR and the GCD seems to focus predominantly on the Cambridge IGCSE curriculum, which is perceived by students to be more rigorous and challenging than programs of study offered in most other high schools. It is on this basis that CCS students feel their schools will prepare them to be successful in college. The foundation for these beliefs are notably unrelated to what Cambridge exam scores might indicate (and disconnected from the overall context of MOWR).

That students make repeated reference to their schools preparing them, rather than having the sense that the CCS environment provides the opportunity to be active in their own preparation for college, suggests students have not yet established full agency over their engagement with school-based learning. This semantic difference between active and compliant fulfillment of college readiness is a subtle yet noteworthy distinction. Differing perspectives on the timeline of students' cognitive development notwithstanding, this may not be especially surprising, considering this study's participants were relatively young (i.e., adolescents between the ages of thirteen and fifteen years). Though outside the scope of this study, further investigation of the role of student agency within the context of MOWR would be a welcome addition to the literature.

An inescapable finding of this study is that school sources of messaging (i.e., teachers and administrators) supply the bulk of information about MOWR to students. However, in these two schools, the flow of information is greatly constricted. In addition, what little information that gets conveyed is being either inaccurately stated to or simply misunderstood by the students. It is not clear from the data which of these is the case, though my professional experience suggests it is a combination of both factors. I also suspect that many ninth grade students are not precisely attune to logistical and procedural aspects of school policy.

In addition to formal, school-based actors, students also form a portion of their perceptions of college readiness in general from messages conveyed by family and friends (both in and out of school). There is little in the data to indicate that students are receiving a measurable amount of information specifically about the MOWR initiative from home or out of school peers. Moreover, classmates contribute only minimally to students understanding of the MOWR policy or the methods by which their college readiness is measured (i.e., Cambridge IGCSE assessments).

Finally, despite undertaking a line of inquiry intended to ferret out distinct differences in perceptions among students from varying ethnic and socio-cultural circumstances and schooling environments, the data do not reveal any significant distinctions between student 'types' or campus location. This could possibly be a result of a misapplication of the research tools or of the methods deployed for this study. On the other hand (and more usefully) this finding may indicate that Collegiate Charter Schools have done a good job of minimizing disparities uncovered in earlier studies of ethnicity

and college readiness (e.g., Rendon 1994; Hurtado, Milem, Clayton-Pederson and Allen, 1998).

CHAPTER 5

CONCLUSIONS

This chapter closes the dissertation by providing a summary of the study's features and a set of conclusions drawn from reflection on the four original research questions. In addressing implications of this research, I offer a pair of conceptual models to explain how study participants' perceptions of Move On When Ready (in aggregate) were constructed through a process of message mediation. Finally, the chapter concludes with a discussion of the limitations of the study and proposals for future research.

Summary of the Study

Recent policy developments such as the adoption and implementation of the Common Core State Standards and state-level examinations such as PARCC and Smarter Balanced suggest that college readiness remains one of the predominant issues driving education policy today. This paper approached the topic from a different angle than many of the more renowned studies conducted on the subject in recent years (e.g., Adelman, 1999; Conley, 2008; Holland & Farmer-Hinton, 2009, Maruyama, 2012), which recommend definitions for and seek to determine influences on college readiness. Instead, I focused on how perceptions affect a student's ability to engage with the concept of college readiness and the factors that play in to formulation of those perceptions. Further, I applied this lens to an investigation of a specific policy intended to promote the college readiness of all students enrolled in two schools participating in the policy initiative, paying particular attention to a comparison of students from different socio-economic, ethnic and environmental circumstances.

In the most general terms, this dissertation consisted of an investigation of student

perceptions of the Move On When Ready policy as it applied to them. To do so, I made efforts to capture a wide array of voices on the subject, including those of the school administrators responsible for implementing the policy and communicating its intent. The personal accounts that I recorded and analyzed led me to assert six claims related to students' ascribed feelings, attitudes, and beliefs toward their schooling and prospects for college going. These claims provided the evidence (or in some cases a lack of evidence) to offer answers to this study's four central questions. Because of the inductive nature of my approach and adherence to grounded theory's dictums toward data analysis, I was able to address some questions more thoroughly than others. Specifically, for two of the questions (1 and 4), the data collected from student interviews did not yield the desired type or volume of responses to allow me to respond as fully to them as I had hoped. This was an unanticipated outcome. As an alternative, however, I have made the attempt to address aspects of these questions in the areas where I was able to tie in relevant findings.

Conclusions

To explore this topic, I investigated four research questions that pertain specifically to Move On When Ready, approaching the overall research problem from a variety of angles. Based on evidence that fell outside the scope of the original questions and the fact that students did not regularly situate their perceptions within the context of the MOWR policy, I took advantage of the opportunity to explore the broader question of *why* students had difficulty engaging with the policy. In this section, I offer my conclusions relative to the original questions. I also provide theoretical propositions for why students hold the perceptions they do in the section that follows, titled Implications.

Research Question 1: *For a student exposed to Move On When Ready, what is her or his perception of the likelihood that he or she will meet the initiative's explicit goal of college readiness and how does a student conceptualize the academic pathways available to him/her in high school?*

Although the answer I offer to this question is of dubious value relative to the questions' original spirit, the answer is informative more broadly. Findings show that Collegiate Charter School students at both school sites hold similar perceptions of the likelihood they will meet college readiness benchmarks. They are simultaneously hopeful and cautiously confident. Unfortunately, relative to the question, students do not have a clear perception of what the explicit goals of the Move On When Ready policy are. Moreover, students' notions of college readiness indicators bear no resemblance to the binary inferred by a model that relies on a set of qualification scores. There are two key reasons for this condition:

1. Most students are unaware the policy exists.
2. In the few case where students have heard of the policy, they have neither a clear conception of how the MOWR model is intended to work nor a firm grasp of the policy's demands for demonstrating readiness.

Both of these reasons have more to do with the schools' implementations of the qualifications model and communication of MOWR's original policy message than they do with students' capacity to understand MOWR's mechanics.

The academic pathways about which students can articulate a perspective begin and end with their Cambridge courses and the grades they receive for their in-class performance. Beyond the way in which scores might impact a course grade, the

Cambridge IGCSE exams do not feature in students' thinking about advancing through a progression of courses. The qualification scores do not come to students' minds as an evaluation of their prospects for success at the next levels of their education. Students view Cambridge as a discrete element of their schools. They do not have the contextual information to draw accurate connections between Cambridge, the Move On When Ready initiative, and Grand Canyon Diploma, and college readiness. Additionally, there is a hazy understanding among students that it is at all possible to use Cambridge exam results to graduate early and around this prospect there is much confusion.

I offer these conclusions without critical judgment of the schools in which this study took place. CCS school leaders are navigating uncharted territory, engaging in the complex task of merging existing practices with a radical departure from well-established, traditional activities. Despite struggling with implementation, my personal experiences in these schools provide me with reason to believe that the concept of performance-based education undergirding a qualification system model has indeed permeated the decision-making processes of teachers and leaders at CCS. In turn, this has led to authentic reconsideration of how students are promoted from course to course.

CCS schools are no exception among MOWR schools that have wrestled with the complexities of a qualification system while pursuing a mission to prepare students for success in college. Notwithstanding CCS's dilemma, indicators such as interview transcripts, notes, journals, state accountability grades, Cambridge IGCSE results, and the work of other researchers suggest the college-going culture at CCS is strong and that students are making measurable academic progress toward college readiness. MOWR has contributed to this culture if for no other reason than the Cambridge IGCSE curriculum

has introduced a demanding series of courses into the schools' academic offerings. Relative to this particular research question, however, the findings of this study (when considered in isolation) are not conducive to issuing more than a set of informed hypotheses.

Research Question 2: *How does knowledge of Move On When Ready (or lack of it) affect a student's ability to recognize the policy's impact on her/his education?*

Of the four questions posed here, findings of this study allow this research question to be answered most clearly and succinctly. There is a preponderance of evidence to support that claim that students interviewed for this study have very little chance of recognizing how the MOWR policy affects their education. It is one of the main points made throughout this paper: Students do not have knowledge or awareness of the MOWR policy. It would then stand to reason that whatever perception students do hold about their education in a MOWR school relies on other messages they receive. It is conceivable that students could build cognizance of a qualification system in their schools without knowing all of its parameters, but the findings herein do not suggest that is the case at either CSS site.

Research Question 3: *How do a student's support networks (e.g., family/peers outside of school and teachers/counselors/peers during school time) affect his/her understanding of educational success as defined within the context of Move On When Ready?*

Here again is a case where the research question and the data do not fully align. Study participants did not possess the facility to define college and career readiness within the context of the policy because they did not know the policy existed. However,

findings from this study allow for a discussion of the students' support networks, which exert sizable influence on attitudes and perceptions.

Each student I interviewed could point one or more persons who affected the ways in which they regarded their schooling experiences. By far, the person most often cited was a teacher. The second most often referenced person was a parent. Siblings and friends both in- and out-of-school rounded out the list of sources for information leading to the formulation of student perceptions.

Students often presented themselves in a compliant posture (bordering on passivity) when talking about their formed perceptions of CCS's instructional designs. Students often used phrases such as "I heard," "She told me," "The teachers tell us," "They say," etc. when explaining how they had come to particular understandings about elements of their schooling experiences. Only one Centrum student (Minerva) indicated that she had conducted online research into the school before enrolling in the high school. She was the sole student to demonstrate a process of procuring information for his or herself. The balance of study participants gave no indication they had actively sought information on which to make decisions about their educations. The seeming lack of agency among these students raises concerns that the CCS schools may inhabit an overly parentalistic domain with regard to messaging and communications about students' educational pathways.⁶ Findings from this study suggest this is a possibility.

⁶ I choose the term 'parentalistic' as a gender neutral alternative to the more commonly used descriptor, *paternalistic*. However, the word is intended to convey the basic notions of paternalism. In this case, I am referring to an observation that the CCS schools have assumed primary responsibility for the achievement and preparation of their students and that the students, in turn, seem to have abdicated much of their personal responsibility for attaining college readiness and relinquished their senses of agency in directing the process and terms of their educations.

Between students, parents and family members, the flow of messaging and its influence on perceptions were more reciprocal. In most cases, students felt they were more informed about what was transpiring in their school than their parents. They believed they were the primary mediators of information making its way to families. Interviews indicated that students at both CCS schools felt this way. Ms. Apple and Ms. Bell also suggested parents were either misinformed about the schools' designs or disengaged from the MOWR model completely. For a few students, older siblings who either had some experience with the Cambridge exams or held opinions about the CCS schools wielded influence on the meaning-making process. In these rare cases, the participants' lack of understanding of MOWR prevented siblings' messages from imposing much influence on student perceptions of the model or its implications.

Finally, out-of-school peers of CCS students predictably had no knowledge of the parameters of the policy. However, their mediation was key to students' perceptions of CCS. An emergent theme of several conversations revolved around beliefs held by out-of-school friends and relatives who looked upon CCS as an elite high school for academically oriented, 'smart' students. Interviewees thought this was a function of the schools' affiliation with the public major research university.

Research Question 4: *Based on the comparative analysis of the perception of students from two distinct academic and social environments, what identifiable commonalities and dissimilarities emerge?*

At each CCS school site, I interviewed a combination of young men and women; students from large families and small families; single and two parent homes; students from blended homes living with extended family; oldest, youngest, and middle siblings;

athletes and performing artists; academically strong and struggling students (as self-reported); with a range of departments from blithe to serious. Between the two groups of students I interviewed, the findings of this study indicate there were many more commonalities than dissimilarities in their perceptions of the Move On When Ready policy.

Intentionally, school interview groups were formed to be not similar nor dissimilar by any discernable demographic metric other than ethnicity. To investigate if ethnicity influenced the perceptions of Latina(o)/Hispanic students, I had arranged with the faculty at Centrum to convene a study sample comprised mostly of students with this demographic characteristic. According to my analysis, ethnicity had an effect on the perceptions of only one of the fourteen students relative to the topics I investigated. That student was neither Latino, nor a Centrum student. Though I did not formally collect socioeconomic data on the study participants, four students did suggest some level of economic hardships in their households. With the exception of Rudi's case (noted earlier), this characteristic did not correlate with a departure in attitudes about schooling experiences from peers who did not reveal their economic circumstance to me.

The only clear separation between the two groups of students was found in the area of student performance on the Cambridge IGCSE course aligned exams the students took at the end of their first year in high school. On average and individually, Atrium students scored measurably higher than Centrum students in both World History and First Language English. These results may have changed perceptions of academic trajectories and acumen after the fact, but that is unknown to me at this time for the reason that exam scores were not available to the students until well after the interview process had

concluded. Leading up to the exams, I did not record any significant difference in the way students were approaching the exams or in the students' expectations for success on them.

Therefore, I am unable to assert with any confidence that there are differences in the mindsets of students between the two CCS campuses. To the contrary, my findings suggest that all of the CCS students interviewed hold shared perceptions of their schools' organization, ethos, expectations and culture. On the other hand, I am more certain CCS administrators hold strong opinions about differences between the student populations at their schools. This, in turn, may have a direct bearing on how these leaders approach students and their families relative to the qualification system. Ms. Bell's comments summed up the schools' viewpoint:

...Ultimately at the end of the day, at both sites, it's about saying our children are ready for success at the university, so if it's not with Move On When Ready, or with Cambridge, then we have another set of responsibilities in terms of what's our other indicators that they are in fact ready. And at [Atrium], frankly, there are kids who are not meeting the PUM score on Cambridge, but their ACTs and their SATs are off the charts. I'm okay with that. [At Centrum], that's not the case. [At Centrum] we're seeing that one-to-one correlation that I was talking about before, so [at Centrum], we really do have to rely on: "they're not ready based on this, so now we have to do this instead."

CCS school leaders are working with information about their students to which I am not privy. With it, each school site is being fed different tailored messages about college

going and academic policies in support of CCS's overall mission. Despite the varied deliveries, their messages have been interpreted similarly by all of their students.

Implications

Modeling Students' perception of Policy. Based on findings of this study, I have developed two models of student perception in an attempt to explain the phenomenon. They were developed to attempt to explain what caused participants to respond to my lines of questioning about Move on When Ready as they did. These models are outgrowths of the diagramming process I conducted during the data collection phase of this investigation. They are conceptual models of student perception relative to the process of policy messaging. The models identify the key actors, or mediators, in the messaging process, and the positions they occupy. The first of these models offers a visual representation of what the process of building student perception might look like if all messages and information were sent *and* received seamlessly, accurately, and in their entirety by all of the policy's actors and stakeholders. The second captures the perception-building process of students enrolled in MOWR schools based solely on this study's findings.

Mediators. In education policy, policy framers are often Politicians and the support mechanisms behind them (e.g., research staffs, constituent groups, unions, etc.). Other times they are simply the conceivers of policy, such as a policy center or 'think tank.' Once policy framers conceive and articulate a policy, it falls to an enactor to initiate its adoption. A branch or department of public government or officially sanctioned body such as board typically serves this role. Institutions adopting education

policy are typically schools; practitioners of policy are likely the schools' staffs and leaders. I refer to this group of mediators as 'formal mediators.'

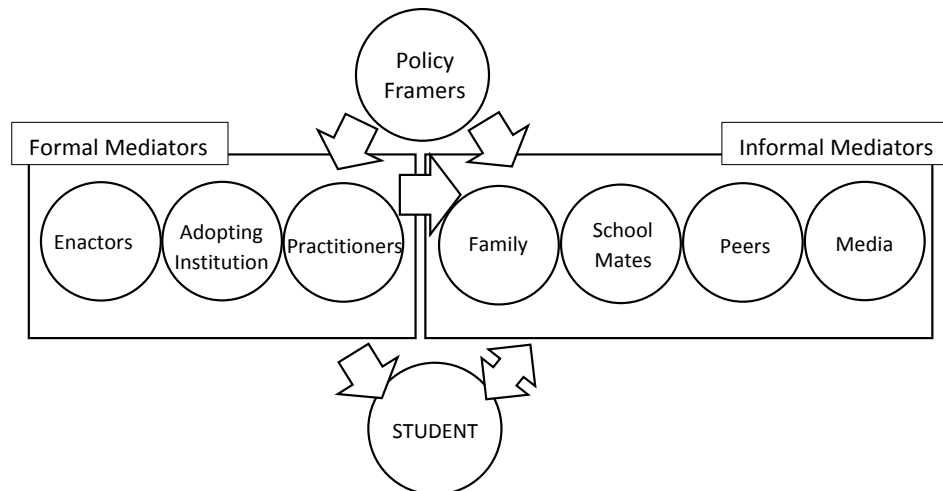
However, mediators occupy both formal and informal roles. The distinction lies in whether the mediator operates in a formal capacity under the law or rules that enacted the policy. Playing a complementary or possibly confounding role, informal mediators consist of conveyors of the policy message with no official role. My data revealed the informal mediators that influence student perception of MOWR include families, classmates, out-of-school peers, and the media.

Figure 4 represents a 'pure' model of student perception. In this conceptual construct, information flows from the policy framers to the student without interference from other actors and without any pollution of the message. That is not to say other mediators do not exist in this model, rather they hold the same understanding of the policy as the framers and do not obfuscate the policy message. As a result, the student has the ability to perceive the policy in the same way it was conceived by the framers. Of course, this is seldom (or more likely never) the case in practice because mediators are human and humans are fallible. Therefore, it is essentially impossible for any policy to be conveyed with one hundred percent accuracy.

Invariably, there is some level of interference in the mediation of the message between framers and targets. Some policies, however, are better understood than others. For example, all 50 United States have policies on the books that make schooling mandatory for children below a certain age (typically sixteen or eighteen). There is little confusion about these compulsory schooling policies and all stakeholders are normally clear about the intent and operation of the policy. It is likely that students' perception of a

policy that requires them to attend school closely reflects the original intent of the policy's framers.

Figure 4. 'Pure' Student Perception Model



At face value, since there is little ambiguity, the policy should be clearly understood by all parties and no mediator conveying the message should exert more influence on perception of the policy than another.

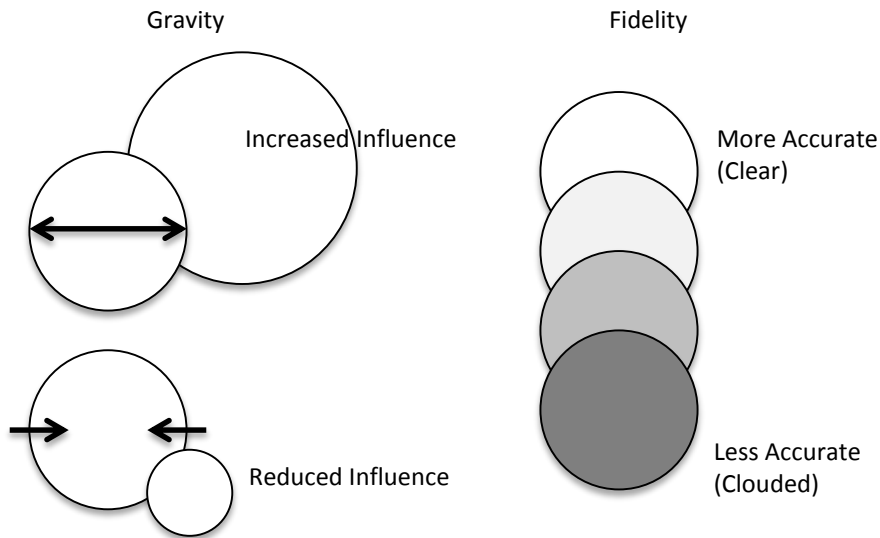
In the case of compulsory schooling, schools enacting the policy, school practitioners, and families are likely the most prominent conveyors of information to students. Since everyone is essentially on the same page, their messages do not overshadow or interfere with the messaging of the other mediators. Likewise other mediators do not derail the accuracy of the message coming from these sources. Yet, even in this example, there is room for the message to be convoluted as it makes its way through the perception-building process. Questions arise: Is the age of release from the policy set at sixteen or eighteen? Does compulsory schooling apply to children with

special needs? Does home schooling qualify? Under the burden of ambiguity, the ‘pure model’ breaks down.

Mediator Variability (Gravity and Fidelity). The moment a policy message is instilled with any degree of complexity, it becomes subject to interpretation or misinformation and the model relinquishes its purity. Conveyors of a message - whether they are formal or informal mediators - will begin to exert influence, or gravity, in unequal proportions on the rest of process. In addition, student perception is affected by the accuracy of a mediator’s understanding of policy and its ability to convey that understanding clearly to the student.

Figure 5 offers a visual representation of the role of the mediator, showing the variability in both gravity and fidelity (i.e., fidelity to the framers original conception) of the policy message.

Figure 5. Mediator Variability



For education policy, how accurately a mediator conveys the policy message will affect the clarity of students’ perceptions. In the best-case scenario, the mediator exerting

the most gravity would also convey the most accurate message, resulting in student perceptions that reflect a clear understanding of what the policy framers intended. Conversely, a strongly conveyed, inaccurate policy message will most likely result in clouded student perceptions.

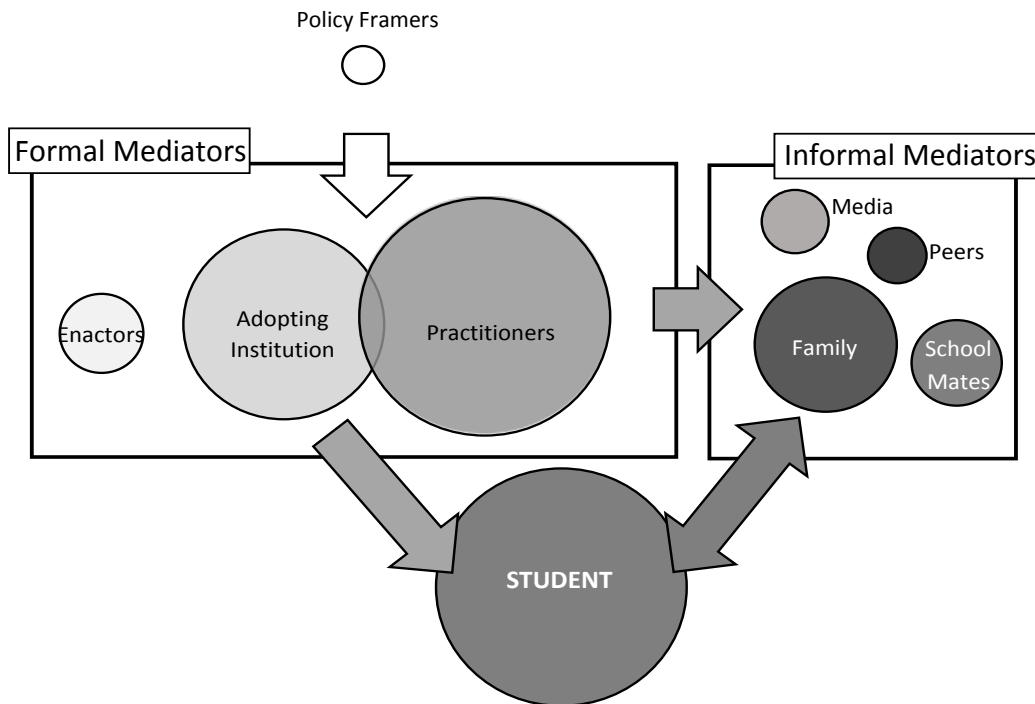
A Student Perception Model for Move On When Ready. When the concept of mediator variability is applied to the student perception model for the Move On When Ready policy, the diagram takes a radically different form than the pure model. Analysis of the data from this study provided information allowing me to estimate the gravity and fidelity of mediators in connection to student perceptions of the MOWR policy. This was based in part by the frequency with which students referred to particular mediators and my estimation of how important those actors were to the process of perception formation.

In the case of MOWR, NCEE undertook framing of the policy with support coming later from CFA and the State Senator in Arizona who moved the bill forward. The primary enactor was the Arizona Legislature, which was responsible for passing the bill (and to some degree the Governor who signed the bill into law). CFA, SBE, and the Arizona Department of Education also fulfilled this role by providing oversight for the initiative. School districts, charter networks, and high schools in which MOWR has been implemented comprise the adopting institutions and teachers and administrators occupy the practitioner roles.

Figure 6 represents the transfiguration of the model based on my interpretation of the data. Arrows signify the flow of messages about the policy. The bi-directional arrow between students and informal mediators suggest that communication between students and the mediators in this group have influence on each other. It conveys the findings from

the section above, which indicate both teachers and school leaders exert the greatest influence on perceptions, followed by family. In actuality, Adopting Institutions and Practitioners inhabit linked and outsized spheres in this model.

Figure 6. Student Perception Model for Move On When Ready



Although students did not refer to ‘schools’ (*per se*) as direct communicators of policy messages as often as they did to parents and other family members, the conjoined relationship between schools and their practitioners dictates this adjustment to the schema.

The accuracy, or fidelity, of student perceptions in this model is shown to be decidedly clouded – a reflection of several of the claims made earlier in this paper. Students simply do not have a solid grasp on Move On When Ready. Their perceptions reflect the fact that they are either unaware or misinformed about the policy's intents and

purposes. The model also shows that students are not alone. As far up the message chain as the enactor level, the original policy message is clouded, an observation I bring from my experience working with enactors such as the Arizona Department of Education and SBE Members who maintain relatively strong but imperfect understandings of the policy. Note that in this conception the policy framers exert very little gravity on the student. That is because there is no indication that the framers have any reported connection to the students. In reality, their sphere of influence could have been represented as a clear dot.

As is the case with any model, we can poke holes in the design of this one. An obvious limitation is the representation of gravity in the sphere depicting the student(s). In theory, this circle could be infinitely large. After all, a student's perception of any policy is his or her full and entire understanding of it. The student at the end of the messaging process is, in effect, his or her own mediator with ultimate influence on understanding. Another is the fact that the model does not entirely account for the difference between fidelity/infidelity and the presence/absence of information. Regardless, whether policy messaging is inaccurate or non-existent, CCS students do not have the information to articulate a well-founded perception about the MOWR policy.

It is important to recognize that the student perception model of MOWR represents an aggregate grouping of the data that were collected for this study. Were models to be displayed at the individual level, they would look different for each student. For some students, for example the Grand Canyon Diploma recipient from the news story I offered at the top of this paper, the sphere representing family might be much larger and much less opaque. Though it went unreported in the broadcast, she and her family had been in direct contact with the policy framers and enactors (The Center for the Future of

Arizona). Therefore, for that particular student, gravity and fidelity for those spheres would also be larger and clearer respectively. The point is, in every individual student's case, perception relies on the context of the perceiver as well as the variability inherent in the mediators in proximity to her or him. Each student can be represented by her or his own model.

Theory into Practice. The student perception model for Move On When Ready can be instructive for all of the stakeholders occupying the mediator spheres of the model. This is especially true for the formal mediators, who are responsible for implementing policy in official capacities. In this section, I discuss the model's relevance for framers and enactors. Since this study took place in schools serving as the primary touch point for students' academic experiences, I also consider the implications of the model for adopting institutions and practitioners, namely teachers and school administrators.

Taking note of the model's representation of fidelity degradation from the policy frame level to each level below it, effort should be made to ensure understanding of and commitment to the policy message is established with formal mediators in order to promote the original intent of a policy. This work should be undertaken from the earliest stages of implementation. Arizona Move On When Ready provides a good example of why. As a vehicle for education transformation, MOWR is designed to migrate school structures from a time-based paradigm to one predicated on performance and qualification. That this shift is occurring unevenly and sporadically in Arizona indicates schools that have signed on to establish working field models of the system have not yet fully committed the system's design. In other words, a qualification system fails to be a

qualification system in these schools when students are not required to meet the standards in order to advance. Under these circumstances, MOWR more closely resembles a curriculum implementation than a complete system change. This is currently the case at CCS.

Making this transformation is no easy task. I do not wish to infer CCS has abandoned its drive toward establishing the qualification system model in its schools. Instead, this study points to a significant implication for policy framers and enactors. I merely wish to emphasize that in order to prove the MOWR model is viable as the central organizing principle of schools, policy framers must first identify schools willing and able to understand and manage all of the complexities of the model. If MOWR is to gain a meaningful foothold on the education landscape, schools, acting as formal mediators, must be in step with the message of the policy's framers.

This study supplies evidence to establish the relationship between the messages schools deliver to their students and the perceptions students build around those messages. These messages are conveyed implicitly and explicitly by the organizational structures and prevailing cultural norms in schools staffed by adults that work there. At CCS, teachers and school leaders reside at the nexus of students' in-school experiences and students' understanding of their potential next steps along the education continuum. At CCS, students have developed a system of beliefs based primarily on what they have been told by faculty and administrators. In some instances, teachers' messages dominate the conversation and their messages have permeated the students' senses of self both as scholars and as community contributors.

Practitioners should be aware of the significant role they play in perception formation among students. Because of their essential function in the process of policy mediation, teacher and administrators ought to be diligent in their efforts to render a policy's intents and purposes as clearly and accurately as possible. This means working hard to develop their own perceptions policy in a way that mirrors the original intent of the framers. This, of course, presumes a philosophical and practical agreement with the policy's contours.

At CCS, mediator messaging has resulted in a population of students secure in the belief that they will attend college and find success once there. This is an excellent outcome. At the same time, the central tenets of the MOWR system have remained mostly out of view of the students. Whether this produces a negative or positive outcome for students remains to be seen.

Limitations of the study

This study is limited in a number of ways. For one, it is a study intended to explore the perceptions of its participants, but those perceptions were collected and analyzed at fixed points in time. As a result, interpretation of participants' stated experiences, attitudes, feelings, motivations, and perceptions are all limited by a condition of *stasis*. The design feature intended to combat this limitation – the use of a two interview series over a period of four months – is only marginally capable of compensating for this constraint. Therefore the study is limited to providing only a fleeting glimpse into the phenomenon. Despite the small the scope, capturing a collection of perceptions, identifying common themes, and making sense of their connections to the behaviors of actors in school settings is an important endeavor. It

serves to inform famers and practitioners involved in policymaking and implementation, and an investigation of students' perceptions of this particular education policy fills a void in the research. Though it would be useful to gain a more longitudinal view in the future and capture the evolution of student perceptions over several fixed points in time, it is not practical in the dissertation format. Ideally this study will provide a launching point for future inquiry.

Another limitation involves the size and composition of the sample group. While the sample demographics and characteristics of the participants are generally representative of the student body composition in the schools where the study took place, it would be unwise to infer that participants' perceptions mirror those held by the balance of the schools' populations. The fact that one of Atrium's own (the student mentioned at the very outset of this study) had parlayed the Move On When Ready policy into an early graduation pathway, demonstrates the contrast among student navigating the same policy environment and shows that CCS student's perception of MOWR was undoubtedly more informed than those of the study participants.

Further, it is not possible to convey the entirety of participants' perceptions or to accurately record all of the factors that influence those perceptions. All similar studies carry this limitation. Despite its original design, this study noted relatively few differences in the reported perceptions or experiences on the basis of gender or ethnicity. It touched only briefly on the research question related to comparing students between school sites. This unfortunate omission was chiefly due to a lack of collected evidence to warrant a deeper analysis on those grounds. Quite possibly I am the party responsible for

this result, as a defect in the construction of the interview instrument is perhaps to blame. This *mea culpa* leads to my final thought on the limitations of the study:

Qualitative inquiry, like any research, can be a messy affair. For the simple reason that researcher and research instrument are one and the same, the methodological decision to apply a constructivist grounded theory lens to empirical research is fraught with potential pitfalls. Regardless of the level of triangulation with other research, advanced data analysis tools, careful reference to notes, diagrams, journals, memos, or detailed documentation of prior interactions with schools, I bring my clouded perceptions of MOWR to the table. Plainly stated, this research is inherently biased. Hopefully, acknowledgement of this fact and the genuine intention to limit subjectivity will mitigate this liability.

Possibilities for Future Research

Arizona Move On When Ready and the performance-based qualifications system model on which it is built are relatively new education policy concepts in the United States. While the basis for the MOWR design is grounded in long-standing education systems of countries such as England, Singapore, Australia, and other regions once held under British jurisdiction, American schools have operated in the credit-based model for nearly a century. In some ways, MOWR is itself an experiment for which findings have yet to be recorded. There are many directions that future research could take to study this particular policy and, across the country, education initiatives like it. An obvious choice would be a study to test whether the student perception model developed here is applicable in other contexts, in other locations, or to other policies.

This study confirmed what other researchers have already noted. That is, MOWR schools are not yet at a place where the qualification system is regarded as the predominant organizing principle around which schools are structured. To their credit, however, there is evidence to indicate that MOWR's early adopters have used the policy to build and sustain strong cultures within their buildings around which college-going is the central aspirational theme. MOWR school leaders have begun the enormously difficult task of re-imagining the structure of course progressions and instructional design. In turn, they have quite likely increased the level of rigor in the courses they are delivering to students. It would be interesting to understand whether there is a tipping point in the implementation process at which time MOWR begins to drive a measurably positive effect on students' content knowledge and academic skills.

The first cohort of students that enrolled in schools participating in MOWR entered grade nine in the fall of 2011. Based on the typical four-year high school experience, these students will approach their graduation dates in May 2015. To date, for the simple reason that the vast majority of MOWR students have not yet left high school, there is no evidence these MOWR students will be better or worse prepared for success in college than students educated under traditional models and, understandably, no MOWR students have yet made it through a postsecondary program. It would be useful to track the performance of these students over time to understand how they perform at the postsecondary level compared to their peers. It might also be helpful to learn if students who opt for the Grand Canyon Diploma and enter college 'early' perform differently than those students who remain in high school for four years.

Another avenue researchers might explore is whether (controlling for other factors such as socio-economic condition, parents' educational attainment and other factors determined to affect college going behaviors) MOWR students demonstrate a higher or lower propensity to gain the 'soft skills' that prior research has identified as important for success in college. It is also easy to imagine a study similar to this dissertation targeting students in different school contexts or perhaps an examination of teachers and school staff to gauge *their* perceptions of the policy. Whether future studies center on Arizona Move On When Ready or a similar policy enacted by some other state, the newness of the qualification system model in the United States presents a vast opportunity to design and conduct research on the topic.

Looking Forward

In a 2015 special issue of the academic journal, *Education Policy Analysis Archives*, a group of education scholars took aim at developing an effective and equitable accountability framework for American education (Darling-Hammond & Snyder, 2015). Comprised of a series of research studies and commentaries, the works presented an extended dialog stemming from a piece published a few months earlier by Linda Darling-Hammond, the issue's editor (Darling-Hammond, Wilhoit, & Pittenger, 2014). This preface to the special issue advocates for an evolution from existing punitive accountability practices toward "aligned systems of assessment and accountability that support genuinely higher and deeper levels of learning for all students, and more flexible designs for schools (p. 3)." The article lays out the well-argued case for developing methods for truly knowing what it means for students to be proficient (e.g., college and career ready) and how to define standards in an empirically valid manner. Further, it

asserts this understanding must be transparent and accessible to all students – especially those from under-resourced backgrounds – as well as education professionals (teachers and administrators), students’ families, and their communities. In effect, the article calls for precisely the type of system that Move On When Ready’s policy framers intended from the outset of the initiative.

However, several authors in the series (see, e.g., Conley, 2015; Marion & Leather, 2015) also argue that the new paradigm for American education should promote multiple measures of student, teacher, and school performance that the MOWR policy does not explicitly identify or overtly amplify. These include measures such as increased cultural capital, metacognition, resilience, and agency among students – reflected earlier in the review of literature from Conley (2007; 2008), Nagaoka (2009), Maruyama (2014) and others – in addition to accountability metrics pegged to school climate, professional conduct of practitioners, and stakeholder involvement in shared decision-making (Darling-Hammond, Wilhoit, & Pittenger, 2014).

As currently designed, MOWR does not yet guarantee that these added factors for promoting meaningful learning and college and career readiness are measured, nor does it provide direct incentives for schools to actively engage in a number of the practices suggested by these researchers. To be effective and sustainable over the long haul, MOWR’s formal stakeholders (i.e., the formal policy message mediators) will likely need to focus intently on ensuring schools become more adept at delivering positive results in these harder to measure areas. While the MOWR policy encourages the use of empirically benchmarked assessments to promote and certify readiness, it remains essentially a test-based system to measure academic performance alone. Due to the fact

that its competency-based credentialing model represents a drastic departure from traditional schemas, it will likely be some time before MOWR schools resemble its aspirational design for American high schools.

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APPENDIX A

RECRUITMENT LETTER: A STUDY OF STUDENTS PARTICIPATING IN MOVE

ON WHEN READY

RECRUITMENT LETTER: A STUDY OF STUDENTS PARTICIPATING IN MOVE ON WHEN READY

BACKGROUND

You are being asked to take part in a research study. Before you decide to participate it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. If there is anything that is not clear, or if you would like more information, please ask before choosing whether you want to volunteer to take part in this study.

The purpose of the study is to learn about the experience of students pursuing the Grand Canyon Diploma through Arizona's Move On When Ready Strategy. The researcher in the study is Michael Silver, a doctoral student at the Arizona State University. In the study, the researcher will explore students' perspectives about their academic experiences and decisions about preparation for college or for their careers beyond high school. The findings of the study will be shared with staff at the Center for the Future of Arizona and faculty at Arizona State University so they can use the findings to better serve other students participating in Move On When Ready.

STUDY PROCEDURE

In this study, you will be interviewed once during the Fall 2013 semester and again during the Spring 2014 semester. You will be allowed to choose the scheduling and location of the interviews. The researcher will ask you questions about how you make decisions about college and career preparation and about people or influences that help you or create barriers in reaching your goals. The interviews will last approximately 30-60 minutes. With your permission, the researcher may audio- and/or video-record the interviews. The researcher may contact you following the interviews to clarify parts of the interviews.

RISKS

The risks of this study are minimal. You may at times feel uncomfortable thinking or talking about personal information related to school, social life family and academic issues. These risks are similar to those you may experience when talking with anyone about personal information. If you feel uncomfortable about the experience, you can tell the researcher, and he will guide you to available resources or release you from the study.

BENEFITS

There are no direct benefits for taking part in this study. However, the information from this study may help develop a greater understanding of how to help future students participating in Move On When Ready.

CONFIDENTIALITY

Your data will be kept confidential. Data and records will be stored on a password-protected computer located in the researcher's office. No one but the researcher will have access to this information. During analysis, your name will not be kept with your responses from the interview. In publications, your name will be removed to protect your identity. Information that identifies you personally will be destroyed after it no longer serves a useful research

APPENDIX B
EDUCATION INNOVATION RESEARCH FELLOW
ROLES AND RESPONSIBILITIES

Center for the Future of
Arizona
Education Innovation Research
Fellow
In Partnership with the National Center on Education and the
Economy

Roles and
Responsibilities

Purpose of the Partnership:

The purpose of this collaboration is to promote and support systemic change through documentation and dissemination of performance-based education models and practices in schools intended to significantly increase the population of students who graduate prepared for college and careers.

Responsibilities for the Education Innovation Research Fellow:

- Anecdotally and empirically document the ways in which Excellence for All (E4A) and Move On When Ready (MOWR) is being instituted throughout the network of partner schools, paying particular attention to commitment to competency based pathways, effective use of aligned instructional systems, and standards/practices that promote college and career readiness for all students;
- Develop an archive of model practices that CFA and NCEE can utilize and offer schools
- for use in planning, implementation, and communication of E4A and MOWR at the local level;
- Document and communicate observations and conclusions for internal use by CFA and NCEE to inform organizational tactics and priorities, and engagement strategies with schools;
- Collaborate with CFA and NCEE leadership to disseminate observations and conclusions through various means depending on audience and purpose;
- Communicate with the University of Michigan Institute for Social Research as needed;
- Support more general project coordination of E4A and MOWR as needed;
- Support and advance CFA specific projects and priorities that relate to, but may extend beyond MOWR (potentially 10% of time); and
- Support and advance NCEE specific projects and priorities that relate to, but may extend beyond E4A (potentially 10% of time).

Anticipated Outcomes:

- a) Increased awareness and understanding of E4A and MOWR implementation approaches and related practices by CFA and NCEE.
- b) Enhanced implementation of E4A and MOWR at the local level across the national network of partner schools.

Reporting:

The Fellow reports directly to the Director of Education Strategy and Innovation, Center for the Future of Arizona, and the Chief Operating Officer, National Center on Education and the Economy.

APPENDIX C

LETTER OF INSTITUTIONAL REVIEW BOARD APPROVAL



APPROVAL: EXPEDITED REVIEW

David Berliner
 Division of Educational Leadership and Innovation - Tempe
 480/861-0484
 berliner@asu.
 edu

Dear David Berliner:

On 10/30/2013 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Study: Student Perceptions of Move On When Ready
Investigator:	David Berliner
IRB ID:	STUDY00000162
Category of review:	(7)(b) Social science methods, (7)(a) Behavioral research
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	<ul style="list-style-type: none"> • Student and Guardian Consent Letter Berliner_Silver.pdf, Category: Consent Form; • Teacher Consent Letter Berliner_Silver 10.28.2013.pdf, Category: Consent Form; • HRP-503a - BERLINER_SILVER PROTOCOL SOCIAL BEHAVIORAL 10.28.2013.docx, Category: IRB Protocol; • TEACHER INTERVIEW PROTOCOL Berliner_Silver.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • STUDENT INTERVIEW PROTOCOL Berliner_Silver.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • ASU Prep Letter of Approval Berliner_Silver.pdf, Category: Off-site authorizations (school permission,

other IRB approvals, Tribal permission etc);

	<ul style="list-style-type: none">• verbal-script Berliner_Silver.pdf, Category: Recruitment Materials;
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The IRB approved the protocol from 10/30/2013 to 10/29/2014 inclusive. Three weeks before 10/29/2014 you are to submit a completed “FORM: Continuing Review (HRP-212)” and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 10/29/2014 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the “Documents” tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-

103). Sincerely,

IRB Administrator

cc: Michael
Silver
Michael
Silver David
Berliner

APPENDIX D
INTERVIEW PROTOCOLS

STUDENT INTERVIEW PROTOCOL

Research Questions

1. For a student exposed to Move On When Ready, what is her/his perception of the likelihood that he/she will meet the initiative's explicit goal of college readiness and, in light of Move On When Ready's college readiness emphasis, how does a student conceptualize the academic pathways available to him/her in high school?
2. How does prior knowledge of Move On When Ready (or lack of it) affect a student's ability to recognize the policy's impact on her/his education?
3. How do a student's support networks (e.g., family/peers outside of school and teachers/counselors/peers during school time) affect his/her understanding of educational success as defined within the context of Move On When Ready?
4. Based on the comparative analysis of the perception of students from two distinct academic and social environments, what identifiable commonalities and dissimilarities emerge?

Background (first interview only)

1. Tell me about why you chose to attend this school?
2. What are your plans for after high school?
3. How would you describe yourself and your family to others?
4. How would you describe yourself as a student?

Students' Perceptions of Move On When Ready (research question 1)

1. In your own words, how would you describe Move On When Ready? (RQ #2 also)

2. How do you think Move On when Ready is working for you as a student?

3. What is your definition of college and career readiness?

4. Will Move On When Ready help you in your path toward college and career readiness? Please describe how (or why not).

Student Knowledge of MOWR (research question 2)

1. How did you find out about Move On When Ready?

2. In your own words, what is the goal of Move On When Ready at your school?

3. What do you know about the Grand Canyon Diploma (and do you intend to earn one)?

4. How have your teachers described Move On When Ready at your school? Do the teachers support the Move On When Ready model? Please explain.

5. What concerns or questions do you have in regard to Move On When Ready?

Student support systems (research question 3)

1. Who do you rely on for help in school?

2. How much do you rely on your family to help you make decisions about school and your future? What do they do?

3. How well do you think your family understands what Move On When Ready is about?

4. Do you have any older brothers or sisters? If so, what do they think about your school?

5. What do your friends who don't go to [school name] think about your school?

Between-school comparisons (research question 4)

1. What do you think makes this campus different from the other [school name] campus?

2. What could or should be done Move On When Ready more successful here?

Closure

1. Is there anything else we have not talked about that you think I should know?

SCHOOL LEADER INTERVIEW PROTOCOL

Research Questions

1. For a student exposed to Move On When Ready, what is her/his perception of the likelihood that he/she will meet the initiative' s explicit goal of college readiness and, in light of Move On When Ready' s college readiness emphasis, how does a student conceptualize the academic pathways available to him/her in high school?

2. How does prior knowledge of Move On When Ready (or lack of it) affect a student' s ability to recognize the policy' s impact on her/his education?

3. How do a student' s support networks (e.g., family/peers outside of school and teachers/counselors/peers during school time) affect his/her understanding of educational success as defined within the context of Move On When Ready?

4. Based on the comparative analysis of the perception of students from two distinct academic and social environments, what identifiable commonalities and dissimilarities emerge?

Background

1. Tell me about your current position and how long you have worked at this school.

2. What is your level of involvement with the students enrolled in the Move On When Ready model?

Teacher Interpretations of Students' Perceptions of Move On When Ready
(research question 1)

1. In your own words, how would you describe Move On When Ready?

2. What effects do you think Move On when Ready is having on your students?

3. In what ways will Move On When Ready influence students' paths toward college and career readiness? Please describe.

4. What concerns or questions do you have in regard to your students' perceptions of Move On When Ready?

Student Knowledge of MOWR (research question 2)

1. What do you do in your classroom to inform students about Move On When Ready?

2. In your own words, what is the goal of implementing Move On When Ready at your school?

3. What is your definition of college and career readiness?

4. What role has the administration played in regard to familiarizing students with Move On When Ready at your school?

5. What role have the other teachers played with the implementation of Move On When Ready at your school/district site? Do the teachers support the Move On When Ready model? Please explain.

Student support systems (research question 3)

1. Which of the students in the study sample do you anticipate will pursue the Grand Canyon Diploma?

2. What do you do (in your classroom and at other times) to support students individual pursuits of college and career readiness qualifications?

3. What could or should be done Move On When Ready more successful here?

Between-school comparisons (research question 4)

1. What do you think makes this campus different from your sister campus?

2. How do these differences affect students?

Closure

1. Is there anything else we have not talked about that you think I should know?