

**LEARNING ABOUT THE ROLE  
OF COLLEGE STUDENT  
THROUGH  
DUAL ENROLLMENT  
PARTICIPATION**

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March 2007

**CCRC Working Paper No. 7**

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Funding for this study was provided by the Alfred P. Sloan Foundation, Teachers College Dean's Grants for Student Research, and the Teachers College/Spencer Foundation Research Training Grant. The author would like to thank Aaron Pallas, Thomas Bailey, and Katherine L. Hughes for their comments on previous versions of this paper.

## **Abstract**

Dual enrollment programs allow high school students to take college courses and receive college credit and have become a popular educational intervention. This paper seeks a rationale for this enthusiasm by exploring whether dual enrollment might serve as a location in which students learn about the role of college student. Sociological theories of role change posit that, if this is the case, dual enrollment might encourage postsecondary persistence. In this study, in-depth interviews and observations were conducted among a sample of 26 students in their first semester of a dual enrollment course. Seventeen of the 26 high school students shifted their conceptions of the role of college student during their first semester in a college course, as indicated by their more accurate descriptions of the role at the end of the course. Changes in participants' role conceptions and identities were encouraged by anticipatory socialization, role rehearsal, trial-and-error, and cognitive interpretation of individual experiences. The paper concludes with implications for programs and policy.

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## Introduction

Educators' and policymakers' concerns about the ability of young people to enter and succeed in postsecondary education have led to calls for increased rigor in high school coursework and for closer collaboration between the secondary and postsecondary education systems (Boswell, 2001; Kazis, Vargas, & Hoffman, 2004; National Commission on the High School Senior Year [NCHSSY], 2001; Pascarella, Terenzini, & Wolfle, 1986; Tucker, 2002; Venezia, Kirst, & Antonio, 2003). Dual enrollment programs represent one attempt to meet this call because many policymakers believe that such programs are able to prepare young people of all academic backgrounds for college. The enthusiasm for dual enrollment stems from an implicit assumption that students' academic preparedness for college will improve through exposure to college-level coursework. In this paper, I interrogate this assumption, positing that the benefits to students are less academic than social. I hypothesize that one possible outcome of dual enrollment participation may be that students better understand the normative expectations of the role of college student. Sociological theories of role change predict that, if this is the case, dual enrollment programs may encourage student matriculation and persistence in college.

Dual enrollment programs allow high school juniors and seniors to take college courses and earn college credit. Sometimes, credit earned in these courses also counts toward high school graduation requirements, an arrangement referred to as "dual credit." In other cases, students earn only college credit. Under both arrangements, students are simultaneously enrolled in high school and college—thus, they are "dually enrolled" in the two institutions.<sup>1</sup> Students in dual enrollment programs take the same courses, with the same syllabi and assessment activities, as matriculated postsecondary students. They are taught by college professors or adjuncts.<sup>2</sup> Students receive a college transcript indicating their achievement in the dual enrollment course that they can use to gain transfer credit upon matriculation into postsecondary education.

Dual enrollment programs vary widely in their structure and target student. However, their status as an "actual" college course, taught by a college professor using the college textbooks and course syllabi, presumably helps students experience the expectations and

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<sup>1</sup> For simplicity's sake, I will refer to all programs that allow high school students to enroll in college courses as "dual enrollment." For a more nuanced description of the defining features of these programs, as well as other credit-based transition programs, see Bailey and Karp (2003).

<sup>2</sup> These adjuncts, however, may be high school teachers "certified" by the college.

demands of a college course. Dual enrollment students are usually admitted as non-degree students to the institution offering the dual enrollment course, sometimes even receiving college identification cards and access to college events or facilities.

Dual enrollment has only recently gained prominence as a widespread educational intervention. Therefore, data on student participation are only beginning to be collected. In 2002-2003, 11,700 U.S. public high schools—71 percent—offered courses for dual credit (Waits, Setzer, & Lewis, 2005). That same year, 51 percent of Title IV postsecondary institutions permitted high school students to enroll in college credit courses (Kleiner & Lewis, 2005). In total, 813,000 students took a college credit course during the 12 month 2002-2003 school year (Kleiner & Lewis, 2005).

Though longitudinal data are unavailable, program-level data indicate that participation has increased in recent years. In New York City, the number of students participating in the City University of New York's College Now program increased 70 percent between 2001 and 2004 (*Partnership for Student Achievement*, n.d.). By 2003-2004, there were over 13,000 enrollments in college-credit College Now courses. In Texas, the percentage of high school students taking dual enrollment courses grew from 4.8 percent to 15.6 percent between 1990-1991 and 2001-2002 (O'Brien & Nelson, n.d.). The number of Florida students participating in dual enrollment grew from 27,689 in 1988-1989 to 34,273 in 2002-2003 (*Florida dual enrollment participation data*, n.d.).

Growth is likely to continue, as well. Currently, 42 states have policies pertaining to dual enrollment (Western Institute Commission for Higher Education, 2006). Some states with standing legislation are considering revisions that would make dual enrollment accessible to more students. For example, in 2005 Tennessee considered legislation that would use state lottery proceeds to fund student tuition in dual enrollment programs. Other states are making dual enrollment a key piece of their high school reform efforts. New Jersey implemented its Twelfth Grade Option program in order to make the senior year of high school meaningful to students. Students can participate in a variety of enrichment activities, with dual enrollment participation being one of the most prominent and popular. The National Governor's Association (2005) has also expressed its support for dual enrollment as a high school reform strategy.

The federal government also supports increased access to dual enrollment. In 2003, it proposed replacing the Carl D. Perkins Vocational and Technical Education Act with the

Secondary and Technical Education Act. A cornerstone of the proposed legislation was the expansion of dual enrollment opportunities for students in technical courses of study (OVAE, 2003). Though the proposed legislation was not passed, the Bush Administration continues to call for greater participation in dual enrollment. The administration's proposed 2006 budget requested funding to expand student access to college courses while in high school. The Secretary of Education's Commission on the Future of Higher Education (2006) has expressed support for the expansion of dual enrollment programs as well.

Why are policymakers and educators so enamored with dual enrollment programs? There is startlingly little evidence of their efficacy (Bailey & Karp, 2003; Lerner & Brand, 2006). Dual enrollment, however, intuitively addresses a variety of problems that reformers have identified with secondary and postsecondary education in the United States. The focus on dual enrollment, in many ways, is part of the larger attention being paid to high school education in the United States. This includes concern about the rigor of the high school curriculum, as well as the success students have when moving from high school into college. Much of this concern is driven by low rates of student persistence in and completion of postsecondary education.

There is substantial evidence that, despite students' desire to obtain a college degree (U.S. Department of Education, National Center for Education Statistics [NCES], 2004) and the economic benefits to doing so (Grubb, 1999; NCES, 2003), many young people will not earn a postsecondary credential. According to the National Center for Education Statistics (NCES) (2005), almost two-thirds of high school graduates enter postsecondary schools immediately after high school. Yet many young adults do not attain a postsecondary credential. In 2003, 57 percent of high school graduates aged 25 to 29 had completed some college but only 28 percent of graduates held a bachelor's degree (NCES, 2005). Low rates of completion occur in both the two-year and four-year sectors of the postsecondary education system.

In addition, students entering postsecondary education are surprisingly unprepared for college-level work. Though they may successfully complete high school requirements, many are placed into remedial or developmental coursework. Nearly 60 percent of postsecondary students need to take at least one remedial course upon entering college (NCES, 2004). Sixty-one percent of students who were high school seniors in 1992 and enrolled in a public two-year college between 1992 and 2000 took at least one remedial course; 25 percent of their classmates who enrolled in a four-year institution also needed some remediation (NCES, 2004). Students

required to take high numbers of remedial courses are more likely to drop out of college before receiving a degree than their counterparts in need of less remedial assistance (Deil-Amen & Rosenbaum, 2002; NCES, 2004).

Thus, it seems that the secondary system is not preparing its graduates to succeed in their future academic endeavors. Policymakers generally offer two reasons for this: low levels of academic rigor during the final years of high school, and a fragmented education system that masks the true demands that colleges make on their students. The National Commission on the High School Senior Year (2001) noted that less than half of high school seniors enroll in “academic” programs of study, and even fewer complete the recommended academic coursework set out in 1983’s *A Nation at Risk* Report (National Commission on Excellence in Education, 1983). The result is that many students end their high school career having completed enough credits to graduate but not engaging in the high-level, challenging coursework that would prepare them for college. The academic expectations placed on them upon matriculation into postsecondary education come as a shock.

Part of the reason for many students’ lackadaisical approach to high school academics is that they do not receive coherent messages regarding what it takes to do well in college. Herein lies the second part of policymakers’ explanation for the failed student transition to college: the sharp divide between the secondary and postsecondary education systems leaves students without a clear view of what is expected of successful college students, preventing them from developing the skills that they need to persist in postsecondary education (Venezia, Kirst, & Antonio, 2003).

Because dual enrollment courses are college courses, proponents believe that these courses can add rigor to students’ high school course-taking. And because the nature of dual enrollment programs demands that colleges and high schools work together, proponents also hope that communication and collaboration between the two sectors will increase. Yet, a careful reading of the policy literature reveals that dual enrollment is presumed to lead to a virtual laundry list of outcomes for students. For example, dual enrollment is believed to provide advanced students with academic challenge during the senior year (American Association of State Colleges and Universities [AASCU], 2002; Boswell, 2001) while simultaneously helping lower-achieving students meet high academic standards (Martinez & Bray, 2002; NCHSSY, 2001); provide academic opportunities to students in small schools (AASCU, 2002; Venezia et

al., 2003); prevent high school dropouts and increase student aspirations (AASCU, 2002; Boswell, 2001) ; help students acclimate to college life (Martinez & Bray, 2002; Venezia et al., 2003); and reduce the cost of college (AASCU, 2002; Boswell, 2001; Martinez & Bray, 2002).

Despite this list of potential benefits to dual enrollment, a compelling explanation of *why* the program should promote these positive outcomes is nowhere to be found. Nor is it clear *how* the myriad benefits actually occur. An overarching theory seeking to explain the mechanisms by which dual enrollment programs lead to student success in college is lacking. Why should we expect one program to lead to so many different outcomes? Can a single program meet the needs of both high achieving students and potential dropouts? And if so, how does it do this? What are the elements of dual enrollment—admittedly a varied and complicated program—that enable students to enter postsecondary education and feel positively enough about their experiences to remain in college through graduation?

This paper attempts to illuminate one reason why dual enrollment participants might have positive postsecondary outcomes. I posit that dual enrollment programs provide students with an opportunity to “try on” the role of college student, thereby increasing their understanding of the role. Presumably, students who are familiar with the demands of postsecondary education and are able to successfully meet those demands are likely to matriculate into and persist in college. If dual enrollment is shown to help students learn what it means to “be a college student,” policymakers may have reason to believe that widespread participation in dual enrollment may lead to increased college access and success.

### **Role and Socialization Theories**

Theories of role change and socialization provide a framework for arguing that dual enrollment may be an appropriate strategy for increasing student persistence in postsecondary education. These theories note that within the social structure, actors inhabit roles, or positions in society. People act in ways that are in accordance with the socially understood behaviors of the roles they are in (Blumer, 1969). Turner (1990) describes the role as “a comprehensive pattern of behavior and attitudes, constituting a strategy for coping with a recurrent set of situations, which is socially identified...as an entity” (p. 87).



In other words, in given situations, individuals act and feel in patterned, predictable ways. At the site of a traffic accident, for example, an observer would expect to see that the drivers are flustered or upset, while the policeman would be cool and detached. The observer would expect the drivers to engage in conversation with each other and the policeman, and would expect to see the policeman writing down information and perhaps filling out a traffic ticket. An individual acting out of “character”—outside the expectations of her role—would challenge outsiders’ understanding of the situation. Hence the surprise and confusion felt when drivers leave the scene of an accident.

When actors exhibit socially expected and understood behaviors in situations, they are locating themselves within the social structure, and providing cues to others as to how they should be recognized. These behaviors and attitudes, known as “role-related behaviors” because they are linked to the definitions and expectations of social roles, allow for individuals to identify and categorize others, and to be identified and categorized themselves.

Lives become patterned around roles. Individuals learn to behave appropriately in given situations by enacting role-related behaviors. Moreover, they come to see themselves as filling specific social roles, and as belonging in role-based locations within the structure. The resulting role-based identities become integrated into actors’ self-concepts and help shape future action and interaction. Over time, the role-related expectations become internalized and integrated into the self-concept. On the other hand, if actors do not feel comfortable in a role, for example if they do not understand the normative expectations or are unable to meet the demands placed on them by role alters, the opposite is likely to occur. Actors unable to successfully enact a role are likely to seek out alternative positions in the social structure, exiting the role in favor of other, more easily enacted ones.

Obviously, no individual has only one social position. Individuals can occupy a variety of roles at any given time. Within the self, roles are arrayed in a hierarchy of salience. When two roles conflict with one another, actors enact the behaviors of the one that is more important, or to which they are more committed. Additionally, because roles are created in interaction, they are not stagnant, invariable things even though they consist of culturally-understood behaviors and attitudes. Turner (1990) notes that the definitions of roles shift over time. There is room for individual creativity within roles. Actors inhabiting the same role may not engage with the role and role alters in precisely the same way. They may choose from a repertoire of socially

identifiable characteristics when enacting the role, and actors may enact slightly different elements of the role than their role-mates. As Ibarra (1999) points out, this is particularly true when a role is relatively diffuse.

So, for example, the role of student is culturally understood to mean that role inhabitants attend school, do homework, engage with teachers and same-age peers, and participate in extracurricular activities. However, students enact the role in various ways. Some participate in class while others do not. Some study diligently, while others do only what is necessary to get by. While some forms of enacting the role are more accepted by role alters than others, there are many ways for a student to enact the role.

Throughout the life course, individuals shed roles and take on new ones. Social or structural changes require individuals to adjust their ways of behaving, cultural repertoires, or ways of understanding the world, as such change leads to new social expectations, social networks, and role alters. These changes can be forced, such as the move out of high school, or voluntary, such as marriage or leaving a profession (Ebaugh, 1988). In either case, individuals must learn new ways of knowing, behaving, and interacting with others, and bring their role-based identities in line with the expectations surrounding their new social location. This process is not immediate, however. Instead, there is often a period in which an actor's understanding of the role and role-related behaviors do not conform with the normative expectations of the role.

But how do actors learn about roles? Theories of socialization help us understand the ways that actors learn about and come to enact normative role-based behaviors and expectations. Socialization occurs throughout the life cycle, often during childhood as young people are prepared for full-fledged membership in their society of origin. This entails learning the values, norms, behaviors, and skills required for the perpetuation of the social group and the success of a given individual within that group (Mortimer & Simmons, 1978). Typically, socialization in childhood is concerned with regulation—of biology, of impulse, of the id. In contrast, socialization during adulthood is concerned with preparation for specific social roles, such as a profession or new family structure, rather than social participation more generally (Mortimer & Simmons, 1978).

Traditionally, views of the socialization process have focused on the ways that role incumbents transmit normative role expectations to role aspirants. Called the induction or structuralist approach, this perspective takes as its starting point the presence of a stable, norm-

oriented society or group into which individuals must be “indoctrinated” (Simpson, 1979; see also Merton, 1957). Those already in the role dictate the skills, attitudes, and knowledge necessary for successful performance of the role, and new entrants acquire these skills by watching, listening, and practicing. It assumes that a coherent set of norms and values exist, and that new role entrants are eager to both learn and enact the normative expectations held by incumbents.

Concerned about the induction approach because of its overemphasis on norms and neglect of agency in socialization, other theorists have proposed a reaction approach to socialization. This perspective focuses on both formal and informal processes of socialization. In addition to exploring the influence of educators and role incumbents on aspirants’ preparation for the role, this perspective acknowledges the part that actors outside of the profession, such as peers or parents, play in shaping aspirants’ understandings of and attitude toward the profession. Thus, it recognizes the agency and creativity of role inductees (Ebaugh, 1988; Olesen & Whittaker, 1968; Simpson, 1979). Instead of conceiving of socialization as a linear process dictated by those already occupying the social position of interest, this perspective sees socialization as a more interactive process. Role aspirants learn about the role from incumbents, but they also “push back” or assert their own conceptions of the role, thereby influencing role expectations and role-related learning.

Within both perspectives, role aspirants are exposed to the normative demands and attitudes of a role prior to entry. This enables them to prepare for the role and enact it successfully once they become role incumbents. This learning process is facilitated by a number of mechanisms. Anticipatory socialization is a broadly-defined process by which potential role entrants learn about the behaviors, attitudes, and values of those who inhabit the role to which they aspire (Brown, 1991; Clark & Corcoran, 1986; Corcoran & Clark, 1984; Ebaugh, 1988; Merton, 1957; Mortimer & Simmons, 1978; Simpson 1979). Simpson (1979) explains that anticipatory socialization helps actors develop three important aspects of preparation for transition into new roles. First, by exploring their future role and engaging (formally and informally) with role incumbents, role aspirants learn the technical demands of the future role. They develop the specific skills necessary to enact role-related demands. Second, engaging in anticipatory socialization provides role aspirants with the opportunity to learn the normative expectations of the role—to witness the values, orientations, habits, and generalized ways of

being displayed by role incumbents. Finally, exploring their future role through anticipatory socialization helps role aspirants develop the motivation to become full inhabitants of the role and to display role-related behaviors in a wide range of situations.

A primary shortcoming of anticipatory socialization is its broad definition in the literature. Virtually any activity occurring before role entry may be viewed as an anticipatory socialization experience. For example, Mortimer and Simmons (1979) say that anticipatory socialization includes “all activities—mental, behavioral, or social—that are performed in preparation for role acquisition. The individual attempts to take on the attitudes and values that are perceived as appropriate for the new reference group” (p. 432). Thus, anticipatory socialization is only a moderately useful analytic construct. In many ways, it is too diffuse to be of use in isolating the experiences and features that help actors integrate role-related learning into their identities.

Still, anticipatory socialization is a popular theoretical construct for understanding role-related transitions. There is a substantial body of literature offering evidence that anticipatory socialization encourages successful role change (Attinasi, 1989; Clark & Corcoran, 1986; Gage & Christiansen, 1991; Lortie, 1975; Shields, 2002; Steffensmeier, 1982). This literature demonstrates that anticipatory socialization might, indeed, enable role aspirants to act in accordance with social expectations soon after entering a new role, thereby easing adjustment to the role and aiding in the creation of a role-related identity.

Role rehearsal, in which role aspirants have the opportunity to “practice” being in the role by engaging in role-related behaviors and conforming to role-related norms prior to full entry, is another mechanism by which aspirants learn about a new role (Ebaugh, 1988). Role rehearsal sometimes occurs as part of anticipatory socialization, but it is a distinct mechanism in that not all actors who engage in anticipatory socialization also engage in role rehearsal. Role rehearsal involves learning through doing—actors learn the normative expectations and behaviors of a role by engaging in those norms, rather than merely observing or being told about the expectations. They may enact some of these behaviors inappropriately, and learn from role alters’ reactions to modify their role-related behaviors. Thus, their role-related learning is refined through experience and interaction.

Presumably, therefore, role rehearsal is an intense, realistic mechanism that enables actors to develop a deep understanding of role-related demands. Ebaugh (1988) notes that role

rehearsal also allows actors to recognize whether or not a new role is a “good fit” (p. 117). If it is a good fit, the role becomes attractive to actors and they are likely to enter it.

Role rehearsal may take a variety of forms. Frequently, it involves internships or apprenticeships, where novices are guided into the role with the assistance of role incumbents. This is common in preparing individuals to enter occupational roles (Merton, 1957; Simpson, 1989; Olesen & Whittaker, 1968). It may also involve an actor informally “trying on” the role, such as when nuns preparing to leave the convent make friends outside of the order in order to observe life as a layperson (Ebaugh, 1988). Babysitting and caring for siblings are sometimes considered opportunities to rehearse the parent role (Steffensmeier, 1982).

### **Dual Enrollment as an Opportunity for Learning about the Role of College Student**

Dual enrollment programs may be seen as an attempt to help students move from their final year of high school into college by modifying their experiences and relationships. When viewed in this light, dual enrollment programs become a social location in which participants may “try on” the role in order to learn about its norms and behaviors. Presumably, this will make their transition into role incumbent—a fully matriculated college student—easier, because they will understand the demands of the role, be able to interact with role alters in expected ways, and enact role-related behaviors successfully. Ultimately, this should help them persist in college. If this theory holds true, then the spread of dual enrollment becomes a logical policy goal.

Exiting high school entails leaving behind the role of high school student and taking on new roles and role-related identities, including that of college student. One reason students may fail to persist in postsecondary education is their lack of understanding of the normative demands placed on college students, and their inability to enact those demands successfully. Successfully “being” a college student includes much more than just the ability to complete college-level academics; it requires navigating a complex system of bureaucratic requirements and a complex social space (Attinasi, 1989) and engaging in new academic and social norms (Shields, 2002; Dickie & Farrell, 1991). Students who do not understand these social demands, and who do not adhere to the expectations placed on them as college students, may not be able to complete their

academic work in a satisfactory manner or to feel comfortable enough in the postsecondary environment to persist to their second year of college.

If dual enrollment helps students learn about the role of college student, we would expect dual enrollment students to enter the role with less stress or sense of dislocation than other students. Because they already understand what is expected of them, they might not spend their initial months in postsecondary education acclimating to their new role; instead, they may be able to immediately perform the behaviors and interact with others in ways that enable them to succeed academically and that might promote their persistence to the second year of college and to graduation.

There is some research evidence indicating that this theory of dual enrollment is a reasoned one. Attinasi (1989) studied the experiences of 18 Mexican-American first-generation college goers, and found that college persistence was, in large part, a consequence of the ways that students actively came to understand the college environment. Much of this interpretation occurred prior to actual college entry, through activities that allowed the students to begin to understand what college was like and how they would be expected to behave. Although students engaged in a range of such activities, Attinasi specifically referred to “direct simulation,” including taking college courses, as an important element of students’ pre-college experiences. He noted that such activities allowed students to discover what college might be like, created expectations of the college experience, and taught what being a college student entails. Though such activities did not exempt students from feeling overwhelmed by or unsure about their new role as a college student, they made the move to college less challenging.

Likewise, Burns and Lewis (2000) found that dually enrolled students discovered that college courses require increased independence, particularly academic independence. Though the study had only six students in its sample and focused on comparing high school- and college-based dual enrollment programs, the findings indicate that students in dual enrollment might learn about and begin to exhibit characteristics of college students. Foster and Nakkula (2005) found that students enrolled in Early College High Schools<sup>3</sup> began to see themselves as similar to college students. They note, “If ‘going to college’ is in the ‘distant future,’ the possibility of

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<sup>3</sup> Early College High Schools may be seen as an intensive form of dual enrollment. These high schools are located on college campuses, and students begin to enroll in college-credit courses as early as ninth grade. A primary goal of these high schools is to use dual enrollment to help students complete the first two years of college at the same time as they complete their high school diplomas.

attaining college credit while still in high school ‘moves’ the ‘future’ ‘closer’” to the present” (p. 15).

## Methods

The research questions for this study are:

- In what ways does dual enrollment serve as a site for students to learn the norms and expectations of the role of college student?
- Through what mechanisms and program features does dual enrollment promote change in role-related understandings?

To answer these questions, I conducted in-depth interviews and observations of students in their first semester of a dual enrollment course. The sample of students was drawn from those participating in New York City’s dual enrollment program, College Now, at one of two comprehensive high schools with large, well-established College Now programs. Students were recruited for the study based on two criteria: their willingness to participate, and their enrollment in their first semester of a college-credit College Now course.

In total, 26 students agreed to participate in the study: 16 from Lynsey High School<sup>4</sup> and 10 from Murphy. Six students, all from Lynsey, were seniors, and the rest were juniors. Fifteen students in the sample were male, and 11 were female. This descriptive information is included in Table 1.

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<sup>4</sup> The names of all schools and students are pseudonyms.

**Table 1:  
Students' Grade, Gender, and College Now Course**

<b>Name</b>	<b>School</b>	<b>Grade</b>	<b>Gender</b>	<b>College Now Class, Spring 2004</b>
Fernando	Murphy	11	Male	Business Computer Applications
Pedro	Murphy	11	Male	Math and society
Maria	Murphy	11	Male	Psychology 101
Carlos	Murphy	11	Male	English 101
Saul	Murphy	11	Male	Business Computer Applications
Shameka	Murphy	11	Female	English 101
Ellen	Murphy	11	Female	Math and society
Michelle	Murphy	11	Female	Math and society
Tracie	Murphy	11	Female	English 101
Saily	Murphy	11	Female	English 101
Jean	Lynsey	12	Male	Psychology 101
Juan	Lynsey	11	Male	Psychology 101
Borat	Lynsey	11	Male	Psychology 101
Wendy	Lynsey	11	Female	Psychology 101
Bashir	Lynsey	11	Male	Psychology 101
Aisha	Lynsey	11	Female	Psychology 101
Ravi	Lynsey	11	Male	Psychology 101
Ibrahim	Lynsey	11	Male	Elementary Statistics
Samira	Lynsey	11	Female	Psychology 101
Kumar	Lynsey	11	Male	Elementary Statistics
Nilov	Lynsey	12	Male	Elementary Statistics
Vijay	Lynsey	11	Male	Elementary Statistics
Raul	Lynsey	12	Male	Elementary Statistics
Bruce	Lynsey	12	Male	Elementary Statistics
Courtney	Lynsey	12	Female	Psychology 101
Mimi	Lynsey	12	Female	Psychology 101

The students represented the diversity of the New York City public schools. As shown in Table 2, four students in the sample were White; two were Black; seven were Hispanic, 12 were Asian, and one was multi-ethnic (White and Hispanic). Because these categories are quite broad, Table 2 also shows the students' families' countries of origin, as reported by the students. This is important because many of the Asian students hailed from relatively undeveloped countries such as Bangladesh, rather than more developed Asian countries such as Korea. Table 2 also shows that the students in the sample spoke a variety of languages at home. Eight students spoke English at home, but the remainder of the sample spoke a second language when communicating with their parents.



**Table 2:  
Students' Racial/Ethnic and Language Backgrounds**

<b>Name</b>	<b>Race/Ethnicity</b>	<b>Language Spoken at Home</b>
Fernando	Hispanic: Venezuelan	Spanish
Pedro	Hispanic: Dominican	Spanish
Maria	Multi-ethnic: Peruvian and Greek	English
Carlos	Hispanic: Colombian	Spanish
Saul	White: Jewish	English
Shameka	Black: Afro-Caribbean	English
Ellen	Asian: Korean	Korean
Michelle	Asian: Korean	Korean
Tracie	Asian: Indonesian	Sumatran
Saily	Hispanic: Dominican and Peruvian	Spanish
Jean	White: Moroccan	Arabic
Juan	Hispanic: Honduran	English
Borat	White: Armenian	Armenian
Wendy	Asian: Burmese	Burmese
Bashir	Asian: Pakistani	Urdu
Aisha	Black: African-American	English
Ravi	Asian: Bangladeshi	English
Ibrahim	Asian: Bangladeshi	Bengali
Samira	Asian: Bangladeshi	Bengali
Kumar	Asian: Bangladeshi	Bengali
Nilov	Asian: Indian	Punjabi, Hindi
Vijay	Asian: Indian	Gujarati
Raul	Hispanic: Ecuadorian	Spanish
Bruce	Asian: Chinese	Cantonese
Courtney	White: Russian	English
Mimi	Hispanic: Puerto Rican and Dominican	Spanish

Participants were interviewed at the beginning, middle, and end of the semester. I used a semi-structured interview protocol for all three interviews. Students were asked to describe their lives as high school students, including their typical day and their view of their peers. They were then asked about their College Now experiences. Questions in this section addressed students' motivation for enrolling in College Now; the structure of the course; the classroom environment and expectations; coursework and study habits; the College Now instructor; and College Now peers. The next set of questions explored students' role conceptions. They were asked to describe typical high school and college students. Students were then asked about their self-concept. They were asked to describe themselves, their goals, and their vision of themselves in the future.

Finally, students were asked about their post-high school plans and for basic demographic information. In total, I completed 76 student interviews with 26 students.

In order to contextualize the interview findings, I spent time observing students in their College Now courses. Students in the study enrolled in five different courses: Elementary Statistics and Psychology 101 at Lynsey High School, and English Composition I, Math and Society, Business Computer Applications, and Psychology I at Murphy High School. All of the courses met at the high school, and were taught by high school teachers certified as college adjuncts. The courses ranged, however, in their structure, rigor, and classroom atmosphere. Business Computer Applications and Math and Society seemed little different from high school courses, while English 101 and Psychology 101 seemed quite similar to what one would expect to see on a college campus.

I conducted two types of observations. First, I observed courses generally—taking notes on what the teacher and students were doing; class content and pedagogy, the rigor of the course, and the expectations of the teacher. At various times, I also conducted focused observations of students in the study sample. These observations focused on the individual student's behavior, engagement, student-teacher interaction, and peer interaction. During each observation, I took detailed notes which were written up within 24 hours of the observation. I observed 16 class sessions. I also observed one non-College Now class session, and a non-credit enrichment activity. Finally, I spent all or part of ten days on the high school campuses meeting with teachers and interviewing students; these days allowed me to observe the general life of the schools.

To analyze the data, I first constructed case studies of each student, based on interviews and observations. Each case highlighted the salient role conceptions and College Now experiences over the three points in time. Using a case template, I summarized the information gleaned from the interviews and student observations.

This enabled me to compare participants' role conceptions at the beginning and end of the semester. The case summaries included a narrative describing these changes, where they occurred, and speculations on what aspects of the College Now experience (or other experiences) may have contributed to the change.

I then coded the case studies along 18 dimensions and placed these codes into an Excel spreadsheet. I included a column summarizing whether or not students underwent shift in role

conception during the semester. I also coded the accuracy of students' role conceptions at the beginning and end of the semester. "Knowledge of the role" was indicated by the extent to which students' description of the role adhered to the normative expectations of college students depicted in the academic literature on college success (Hurtado, Carter, & Spuler, 1996; Hurtado & Carter, 1997; Nora, Cabrera, Hagedorn, & Pascarella, 1996) and literature on student success in college, including course syllabi from student success courses (Bell & McGrane, 2000; Dembo, 2000; Leamson, 1999).<sup>5</sup> The closer students' descriptions were to the role expectations derived from the literature and interviews analyzed for this study, the more realistic their role conception. When coding student knowledge of the role, the key question I sought to answer was the extent to which the description could be used to guide successful enactment of the role.

The codes included:

- *None or little knowledge:* The student provided little detail about the role of college student, and was unable to articulate the normative behaviors or expectations of role incumbents.
- *Idealistic or highly generalized:* The student provided a highly normative description of a college student. The description might have been highly reliant on popular media, idealized, or unrealistic.
- *Realistic but vague:* The student gave a generalized description of the role that, while not incorrect, included little detail or high levels of uncertainty. This description would be a minimally useful guide for enacting role expectations.
- *Strong:* The student gave a realistic, detailed, and nuanced description of the role. This description may have included strategies for enacting the role, an understanding of variation within the role, and details useful in guiding successful role incumbency.

These codes are relatively broad in order to allow for maximum variation in student role conceptions. Though displayed hierarchically, they are more of a continuum than set phases of knowledge. Students at all four levels could learn more about the role, as even role incumbents are continually refining and expanding their understanding of a role. Students who moved from a lower code to a higher code were seen as changing their conception of the role.

Excel allows for the manipulation of data through its sort function. I used this function in order to explore patterns across the data. For example, I sorted the spreadsheet by whether or not

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<sup>5</sup> Analyses of this literature and explication of the college student role are available from the author.

students increased their understanding of the college student role. In doing so, I was able to see what, if any, characteristics students who increased their role conceptions had in common. Throughout the analysis, I engaged in a memoing process during which I explored trends in the data.

## **Findings**

### **Change in Conception of the College Student Role**

If the conceptualized model of dual enrollment is supported, we would expect to see a number of trends in the data. First, we would expect to find few students starting the semester with a highly detailed understanding of the role of college student. Most students were juniors, and all were in their first semester of College Now and thus were just beginning to face role incumbency. Given their general orientation toward college, we would expect them to have some idea of the role, but not a well-developed one. Second, given the theoretical expectation that students in College Now learn about the role of college student, we would expect to find students increasing their role conceptions toward a strong understanding by the end of the semester. Such a shift would indicate that students do, in fact, develop more accurate conceptions of the role of college student during their first semester in a College Now course.

Table 3 illustrates that the data support these expectations. The students in the sample did not have clear understandings of the role of a college student at the beginning of the semester. Two students had virtually no knowledge of the role, and seven had idealistic or highly generalized understandings. Sixteen students had realistic but vague role conceptions. Only one student was able to clearly articulate the role of a college student during her first interview.

By the end of the semester, one student continued to have little or no knowledge of the role, and three students had idealistic or highly generalized role conceptions. Nine students had realistic but vague understandings of the role of college student, and thirteen students had strong role conceptions. In total, seventeen students increased their role conceptions over the course of the semester. Thus, it is reasonable to conclude that students in College Now do learn about the role of a college student.

**Table 3:  
Changes in College Now Students' Conceptions of the Role of a College Student**

<b>Name</b>	<b>College Now Class, Spring 2004</b>	<b>Description of College Student, Interview 1</b>	<b>Description of College Student, Interview 3</b>	<b>Change in Role Conception?</b>
Fernando	Business Computer Applications	Idealistic or highly generalized	Realistic but vague	Yes
Pedro	Math and Society	Realistic but vague	Realistic but vague	No
Maria	Psychology 101	Realistic but vague	Strong	Yes
Carlos	English 101	Realistic but vague	Strong	Yes
Saul	Business Computer Applications	Realistic but vague	Strong	Yes
Shameka	English 101	Realistic but vague	Strong	Yes
Ellen	Math and Society	Realistic but vague	Realistic but vague	No
Michelle	Math and Society	None or little knowledge	Idealistic or highly generalized	Yes
Tracie	English 101	Realistic but vague	Strong	Yes
Saily	English 101	Realistic but vague	Strong	Yes
Jean	Psychology 101	Idealistic or highly generalized	Realistic but vague	Yes
Juan	Psychology 101	Realistic but vague	Strong	Yes
Borat	Psychology 101	Realistic but vague	Strong	Yes
Wendy	Psychology 101	Idealistic or highly generalized	Realistic but vague	Yes
Bashir	Psychology 101	Idealistic or highly generalized	Idealistic or highly generalized	Yes
Aisha	Psychology 101	Idealistic or highly generalized	Strong	Yes
Ravi	Psychology 101	Realistic but vague	Realistic but vague	No
Ibrahim	Elementary Statistics	Realistic but vague	Realistic but vague	No
Samira	Psychology 101	Realistic but vague	Strong	Yes
Kumar	Elementary Statistics	Realistic but vague	Realistic but vague	No
Nilov	Elementary Statistics	Realistic but vague	Realistic but vague	No
Vijay	Elementary Statistics	None or little knowledge	None or little knowledge	No
Raul	Elementary Statistics	Idealistic or highly generalized	Strong	Yes
Bruce	Elementary Statistics	Realistic but vague	Strong	Yes
Courtney	Psychology 101	Idealistic or highly generalized	Idealistic or highly generalized	No
Mimi	Psychology 101	Strong	Strong	No

Maria, for example, started the semester with a vague and uncertain description of a college student. When asked to describe a college student, she replied,

They could pick like what times they wanna go in and what times they wanna leave. They can go to class if they want, or not, and I guess, the teachers don't really mark them there. Or something. They have to do their homework and the projects or whatever.... They're more mature, I'm guessing (Interview 1, 2/10/04).

Her description focused on these superficial aspects of the role, without describing the normative behaviors that go along with the freedoms described in the quote above. Most of Maria's description was generalized common knowledge, rather than specific knowledge that could guide her behavior in the role. Maria also focused mostly on the personal traits of college students rather than the academic skills, habits, or interpersonal interactions commensurate with the role.

During her first interview, Maria exhausted her knowledge of the role in just a few short statements. When probed, she was unable to give additional details. When asked to expand upon a comment regarding the difference between high school and college, she exclaimed, "I don't know, I've never been to college!" (Interview 1, 2/10/04).

Maria's first description of a college student was very uncertain. She frequently prefaced her comments with phrases such as "I guess" or "I'm guessing." It is not that Maria gave an inaccurate portrayal of the role at the beginning of the semester. Rather, it is that the description she gave leaves the reader with very little sense of the role's expectations and norms, and could not serve as a guidepost for Maria's enactment of the role upon entry.

By the end of the semester, however, Maria's understanding of the role increased. Though she continued to exhibit some uncertainty about the role, again using phrases such as "I'm guessing....," her description contained more depth and detail than in the first interview. First, the sheer amount of information Maria provided in her description, particularly when compared to the sparseness of detail in her first interview, indicates that she knew more about the role in June. In her case report, the extent of her knowledge in the first interview could be summarized in three short paragraphs; it took nearly a page to do so for the third interview.

Maria also touched on a variety of the elements of the role of college student in the third interview, broadening the image provided. She continued to recognize that college students must display personal traits such as a seriousness of purpose and ambition. But she also recognized that they must engage in new academic habits and skills. She said that they must write papers and read textbooks. “Like the papers [college students] have to do, they don’t get, like questions. They have to write essays or something, like read chapters and summarize those chapters” (Interview 3, 6/8/04). Maria also implied that college students must take responsibility for their own learning. She said that college students are not coddled the way high school students are: “...high school is more personal, and college is more, ‘I’m teaching you it so you have to learn it now’” (Interview 3, 6/8/04). Maria added that, as a result, college students must seek out help by waiting for their professors after class and asking questions.

In addition to providing a broader image of the role of a college student, Maria provided more details of the role in the third interview than in the first. She also included strategies for enacting the role, which she did not do in the first interview. And, when probed, she was able to expand on her description.

### **Is Dual Enrollment Participation the Reason for Students’ Increased Conceptions of the College Student Role?**

Students may learn about the role of college student from a variety of sources. However, the data indicate that participants’ College Now experiences are related to whether or not they learned about the role. Thus, College Now is likely responsible for this learning. Most importantly, the quality of students’ College Now courses was strongly related to their learning. Students’ own perceptions of their College Now experiences were related to their learning, as well. Taken together, these two findings indicate that it is both the social location of the College Now course and students’ interpretation of those experiences that help students come to understand the role to which they aspire.

*College Now course.* We would expect that students enrolled in courses that closely mirrored the demands of classes on college campuses would learn the most about the role of college student. Students in authentic courses presumably would have more opportunities to

learn about the role. The difference between high school and college might be starker for these students; they might be expected to engage in a higher number of new behaviors; and they might experience a variety of new norms and expectations. Thus, they would be able to better articulate the demands of the college student role in their third interview than their peers in less authentic courses.

The data bear out these expectations. As noted earlier, English 101 and Psychology 101 most closely replicated the demands of college courses, while Math and Society, Business Computer Applications, and Statistics 101 were less effective in doing so. Thus, we would expect more students in the first two courses to increase their role conceptions than students in the latter three. Students in all five courses in the sample increased their understanding of the role. However, with the exception of Business Computer Applications, there was a direct correlation between the authenticity of the College Now course and students' increased understanding of the role of a college student.

Another way to conceptualize the relationship between College Now course and change in role conception is to determine how many students in the sample adhered to the expectation that they would increase their understanding of the role if they were in an authentic course but not if they were in an inauthentic one. Eighteen students, or nearly three-quarters of the sample, adhered to this pattern, which is summarized in Table 4.

**Table 4:  
Increased Understanding of the Role among Students in  
Authentic and Inauthentic College Now Courses**

	<b>Increased Understanding of the Role</b>	<b>No Change in Role Conception</b>	<b>Percent Increasing Understanding of the Role</b>
Authentic course	12	3	80
Inauthentic course	5	6	45

p=.103, two-tailed Fisher's exact test

Carlos, for example, enrolled in English 101, the most authentic course in the sample. He shifted his role conception from a realistic but vague understanding of a college student to a strong understanding. In his third interview, Carlos gave significantly more detail about the role,



rationales for why skills and habits are important, and strategies for enacting the role than he did in the first interview. He used college terminology (professor rather than teacher, for example).

Carlos also spontaneously offered details in his third interview, whereas in his first interview, he was unable to do so even after being probed. For example, in his first interview, after much questioning about the skills possessed by college students, Carlos said that they read a lot. In his third interview, he again said that college students read a lot. In this interview, however, he added that the reading is difficult, requires a large vocabulary, and helps students broaden their horizons. It is interesting to note that these details coincide with one of the defining features of the English 101 course—frequent reading that, while not long, included challenging vocabulary words and sought to open students’ minds to new cultures and ideas.

In contrast, Kumar enrolled in Statistics 101, a relatively inauthentic course. In both interviews, he was virtually unable to describe a college student. The little information he did provide was given with great uncertainty, and could not be used to guide his behavior upon entry into the role. For example, he said, “There’s like, I don’t know, I hear there is like a lot of organizations in college”; college students join these organizations because doing so helps them get good jobs after graduation (Interview 3, 6/2/04). There was no evidence that his knowledge of the role increased over the course of the semester.

This finding strongly indicates that College Now does serve as a location in which students learn about the role of college student. If the 17 students who increased their role conceptions did so as the result of non-dual enrollment factors, such as family influences, then the quality of College Now would not matter. Learning would occur evenly across the sample, regardless of the authenticity of students’ College Now experiences. Such was not the case.

Instead, students who received the intended dosage—a course environment closely mirroring that on a college campus—were more likely to learn about the role of college student than their peers in less authentic courses. Stable role conceptions appear to be the result of poor course implementation, rather than because of a null finding. It is likely that if Math and Society, Business Computer Applications, and Statistics 101 were modified to become more like on-campus courses, more students would increase their understandings of the role of college student. Because course authenticity influences student learning, it seems that there is something occurring in College Now courses—particularly well-implemented College Now courses—that helps students learn about the role of a college student.

*Seeing College Now as a college course.* There is also a relationship between students' perceptions of College Now as college and their learning about the role of college student. We might expect students who saw College Now as similar to college to learn about the role. Such students might have been inclined to interpret the expectations of College Now as college expectations, and have been more attuned to the college-like nature of the course. Thus, they would be likely to interpret the course's demands as college demands, generalizing those demands to the role of college student, and developing broad learning about the role. Students who did not see College Now as similar to college might be expected to interpret course demands as simply the result of teacher idiosyncrasies or preferences. We would therefore expect them to learn less about the role.

Sixteen of the 26 students in the sample adhered to these expectations. Twelve students who saw College Now as similar to college shifted their role conceptions and four who did not see College Now as college did not shift their understanding of the role. This finding is illustrated in Table 5. Although this pattern is less strong than that of role change and course authenticity, I report it for two reasons. First, one cell is much larger than the others, indicating that a pattern does exist. This cell indicates that seeing College Now as similar to college is related to the outcome of interest (increased understanding of the role). Secondly, the influence of students' perceptions of their College Now course is a theme that will be revisited later in this article. Thus, it is important to note that the relationship exists.

**Table 5:  
Increased Understanding of the Role among Students  
Who Did and Did Not Perceive College Now to be Similar to College**

	<b>Increased Understanding of the Role</b>	<b>No Change in Role Conception</b>	<b>Percent Increasing Understanding of the Role</b>
College Now as college	12	5	71
College Now not like college	5	4	56

p=.667, two-tailed Fisher's exact test

Aisha believed that College Now was similar to a college class, and interpreted the demands of the course as college demands. She noted that her psychology teacher was trying to give College Now students the “full college experience” (Interview 2, 4/23/04). Thus, she saw the difficulty of course exams to be a result of the college level of the course. She said, “And for his tests, he gives us tests that they would for college, about the chapters” (Interview 2, 4/23/04). She did not see the tests as difficult because the teacher was difficult, but because such difficulty is a feature of college courses generally. Aisha shifted her understanding of the role of college student from idealistic to strong over the course of the semester.

On the other hand, Pedro did not find College Now to be like college. Instead, he interpreted the demands of Math and Society as specific to the teacher. He indicated that the teacher’s desire to let students work at their own pace stemmed from her nice personality, rather than from the fact that, in college, students must take responsibility for their own academic progress. Thus, he did not generalize the college-like characteristics of his College Now course to college generally. Throughout the semester, he continued to have a poorly defined conception of the role of a college student.

This finding draws our attention to the importance of agency in the role-learning process. “Placing” students in an environment in which they might learn about a role is not enough; role aspirants do not automatically interpret their learning environments in the ways that role incumbents expect. Rather, College Now students viewed their course experiences through their own unique lenses, incorporating (or not) their learning into their preexisting understandings of the role of high school and college student. Students who viewed College Now as part of college incorporated their experiences into mental schemas of “college student.” They internalized this learning, using it to create a deeper understanding of the college student role. But students who did not view College Now as college interpreted their course experiences differently; they did not activate a college student schema and thus did not always increase their role-related knowledge.

Thus, as Olesen and Whittaker (1968) point out, role-related learning is not dictated by role incumbents or by learning environments. If this were the case, all students in the sample would have learned about the role, because that is one goal of the College Now experience. Instead, individuals’ personal understandings of their social location came into play, as students

interpreted their course experiences and integrated those experiences into their schemata of the world around them in their own ways.

## **Mechanisms Encouraging Change in Role Conception**

### **Anticipatory Socialization**

As noted earlier, anticipatory socialization is a broadly-defined concept that is operationalized in a variety of ways. Simpson (1979) provides analytic guidance for this task. She notes that preparation for role incumbency occurs along three dimensions, and that anticipatory socialization can address all three. First, anticipatory socialization helps aspirants learn the technical demands of the role. Second, aspirants develop an understanding of the norms and values held by role incumbents. Finally, anticipatory socialization experiences help aspirants develop motivation to enter the role.

*Technical skills.* College Now helped many participants learn the skills and behaviors characteristic of the college student role. In doing so, students became more able to articulate these demands, thus increasing the accuracy of their role conceptions.

In the second interview, students were asked to describe their College Now course in detail. The questions and probes required the students to describe which skills they used to be successful College Now students. They were asked to describe their activities in class (such as note taking and classroom discussions) and their out-of-class study habits. Students were asked to describe which skills they actually used, as well as how they learned that such skills could help them be successful in College Now.

Students who engaged in more technical skills in their College Now course were also likely to learn that such skills were components of the college student role. None of the eight students who had stable role conceptions reported engaging in more than two college student skills. In contrast, students who increased their understanding of the role generally reported engaging in a variety of college student skills. This relationship is illustrated in Table 6.

**Table 6:  
Learning the Technical Skills of the Role in College Now  
and Increased Role Conception**

	0-2 Skills	3-5 Skills	6-8 Skills
Increased understanding of the role of college student	6	11	1
Did not increase understanding of the role of college student	8	0	0

In addition, as already noted, the authenticity of the College Now course was related to whether or not students increased their understanding of the role. Students in Psychology and English—which required students to engage in a variety of the skills required of college students—were more likely than their peers in other courses to end the semester with more developed and accurate role conceptions. Thus, it appears that College Now sometimes served as a location in which students learned about the technical skills required of college students and used that knowledge to refine their understandings of the role.

*Norms and values.* Students in College Now also had the opportunity to learn about the norms and values of college student role incumbents. These norms include valuing hard work and persistence. College students are also expected to demonstrate motivation, to take responsibility for their academic progress, and to respect others’ viewpoints.

All of the students in the sample were motivated, as they were enrolled in an additional course meeting outside of the school day. They also valued education and a college degree in particular. However, College Now did provide the opportunity for some students to learn that being a college student entails valuing persistence, responsibility, respect for others, and academic self-monitoring. These students were more likely to increase their understanding of the role of college student than their peers. Fourteen of eighteen students who shifted their understanding of the role indicated that they learned about the values entailed by the role, while only four of eight who did not change their role conceptions did so (not shown).

Raul, for example, began the semester with an idealistic understanding of the role. He described college students as having much free time and very little work to do. At one point, he noted that it is “better” to have classes back-to-back during the day, because “you probably stay in school two, three hours and then you go, leave... And you actually get to go home, have your

nap and relax. Wake up and do whatever it is you gotta do. Watch TV” (Interview 1, 2/24/04). He did not recognize that part of being a college student includes doing work in advance and staying on campus to ask professors or peers for assistance.

However, in College Now, Raul discovered that college students are expected to take responsibility for their own learning if they are to be successful in the role. He began to review his notes on his own because the pace of the course was so quick that he could not keep up otherwise. He also took responsibility to get notes from his friend when he was absent. He found that, through this diligence and conscientiousness, he was able to be successful in the course. By the end of the semester, Raul was taking such responsibility for his coursework that he came to class even when his mother was in the hospital (observation, 6/7/04).

Raul integrated this learning into his understanding of the role of college student. In his third interview, he demonstrated a strong understanding of the role. Moreover, his description focused on the normative attitudes demonstrated by college students. He noted that college students must motivate themselves to study, do their work on their own, and spend much time out of class doing schoolwork. He said that in college, “you gotta do it [be academically successful] all on your own” (Interview 3, 6/2/04). He added that college students’ success:

...all depends on how willing they are, or independent and committed they are to getting a good grade. So let’s say I want this grade. So then they gotta keep it in their head, “I gotta study, gotta come to class, gotta do my work, gotta pay attention” (Interview 3, 6/2/04).

This description of the college student role is very similar to the new habits and attitudes Raul was expected to demonstrate in his College Now course.

***Motivation to enter the role.*** Finally, anticipatory socialization is presumed to increase students’ motivation to enter postsecondary education and integrate the college student role into their self-concepts. It is less clear that College Now did so, in large part because the students in the sample began the semester with strong commitments to college attendance.<sup>6</sup> At both the beginning and the end of the semester, 25 of the 26 students had plans to enter college

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<sup>6</sup> In addition to planning to attend college, most students in the sample (even the juniors) had begun to take concrete action toward doing so. This included studying for or taking the SATs, exploring college options by attending college fairs or searching the World Wide Web, or discussing college applications with counselors, teachers or other adults.

immediately after high school graduation.<sup>7</sup> Having prepared for college (taking the SATs, identifying colleges to attend, visiting a college, or submitting an application) was unrelated to whether students increased their college student identities.

In the balance, however, College Now was a location in which participants underwent anticipatory socialization, which encouraged them to learn about the role of college students. They were exposed to the technical demands, norms, and values of the role. Presumably, this will help them enact the role successfully upon becoming role incumbents.

### **Role Rehearsal**

As noted earlier, role rehearsal is a process in which role aspirants practice the demands of the role (Ebaugh, 1988; Simpson, 1979). It is presumed to help actors learn about the role, as by practicing it, they will be exposed to the normative expectations held of role incumbents. This is likely to teach them what, exactly, is entailed in entering the role. Unlike anticipatory socialization, which includes almost any form of learning about a role, from watching stylized television images to interacting with role incumbents, role rehearsal includes hands-on, concrete learning. Actors engaging in role rehearsal are able to practice the role by taking on some behaviors of role incumbents.

The data indicate that role rehearsal in College Now is a mechanism by which students learned about the role of college student. Seventeen students reported engaging in role rehearsal; 13 increased their understanding of the role. Of the nine students who did not report engaging in role rehearsal, five increased their role conception. This relationship is illustrated in Table 7.

**Table 7:  
Engaging in Role Rehearsal in College Now and Increased Role Conception**

	<b>Increase in Role Conception</b>	<b>No Increase in Role Conception</b>	<b>Percent Increasing Role Conception</b>
Engaged in role rehearsal	13	4	76
Did not engage in role rehearsal	5	4	56

p=.382, two-tailed Fisher's exact test

<sup>7</sup> Long-term research is needed to see if students actually follow through with these intentions.

The process by which role rehearsal encourages an increase in role conception is similar to the process by which anticipatory socialization increases role conception. In both cases, students learned about the role through their exposure to role-related demands and expectations. This exposure came from the explicit and implicit demands made on students by their College Now instructor, the feedback students received on their course performance from the instructor and their peers, and classroom norms developed by the instructor and peers. Through exposure to the academic and social climate of their College Now course, students generalized to their broader image of “college student,” thereby developing a stronger understanding of what it means to inhabit the role.

For example, College Now students were required to engage in academic self-monitoring and to take responsibility for their own learning. In the third interview, many students included these characteristics as elements of the college student role. Similarly, College Now students often described the academic skills required of college students in more detail in their third interview because they had been expected to demonstrate these skills in their College Now course.

Saily is an example of a student who integrated her experiences in College Now into her understanding of the role. She began the semester with a realistic but vague role conception. This image was based almost completely on her older sister’s college experiences, rather than a more generalized understanding of the role. She offered few details about the role, and was unable to expand upon her answers when probed. For example, when asked to describe a typical college student, she replied, “I don’t know exactly what a typical college student is like, ‘cause I haven’t gone to college and I don’t know many people who are in college” (Interview 1, 3/9/04).

By her third interview, though, Saily had a strong understanding of the role. When asked to describe a college student, she went into great detail, offering a general description of college students’ behaviors and attitudes, as well as strategies that college students might use to successfully enact the role. She understood that college students must take responsibility for their academic progress, and must balance newfound freedom (both academic and personal) with school demands. In class, college students often engage in discussions, and Saily recognized that these discussions require them to be open-minded. She also said that college students must be



organized and skilled in time management. She described thought-processes and strategies that college students use to accomplish this by saying,

...you have to like state out what you are gonna do like Tuesday and Wednesday and Thursday, “I have to get my projects for this class and then I have to read for this class on that day so I could be prepared” and stuff. You have to give yourself like an outline for the week (Interview 3, 6/3/04).

What is interesting about Saily’s learning about the role is that it closely mirrors her experiences in College Now. In English 101, Saily’s College Now course, the instructor expected students to take responsibility for completing assignments on their own, without constant reminders from the instructor. Saily described this expectation by saying, “He’s [the instructor’s] not gonna be on our tails saying, ‘OK, you gotta do this work, you gotta do that work...’ And if you’re not doing it, well, you’re not passing” (Interview 2, 4/27/04). When describing the college student role in her third interview, she said that college professors are “not gonna be down [college students’] backs” (Interview 3, 6/3/04). This is not a feature of the role that Saily discussed in her first interview; it therefore appears that her experiences in College Now helped her learn about the expectations held of role incumbents. Moreover, Saily did not learn these expectations because someone told her about them, or because she observed others engage in them. Rather, she learned these features of the role by experiencing them for herself—she was expected to act as a college student and therefore came to understand the demands placed upon role incumbents.

Thus, it seems that both anticipatory socialization and role rehearsal help explain how some College Now participants learned about the role of college student. In essence, College Now provided students with a “sneak peek” at the expectations awaiting them in the role. In experiencing the demands, students were able to refine their understandings of what it means to be a college student. They clarified the behaviors in which college students engage, the attitudes they exhibit, and the norms under which they function. College Now students also gained a concrete frame of reference in which to place these understandings. The role was no longer a vague concept to them; its demands had been contextualized and made real.

## **Conclusions and Implications**

The goal of this paper was not to evaluate student outcomes in dual enrollment. Instead, it was to find evidence establishing the possibility that dual enrollment might encourage postsecondary persistence by increasing students' conceptions of the college student role and college student identities. I hypothesized that dual enrollment participation may help high school students learn about the role of college student because it provides them opportunities for anticipatory socialization and role rehearsal.

The findings support this hypothesis. College Now was an environment in which students were able to learn about the role, as the majority of the students learned about the role of college student. Eighteen students shifted their conceptions of the college student role over the course of the semester. Students were able to articulate the demands of the role more clearly, more strategically, and with greater depth of understanding in June than they were in February. Moreover, this shift appeared to be encouraged by the College Now environment. The authenticity of the College Now course was strongly related to whether or not students shifted their role conceptions, indicating that high-quality dual enrollment experiences are likely to encourage such shifts. Students who perceived their College Now course as similar to college were also more likely than their peers to change their understanding of the college student role.

This change in role conception was encouraged by a number of mechanisms supported by the College Now environment. Students in College Now had the opportunity to engage in anticipatory socialization, in which they learned about the role and "anticipated" engaging in its normative demands. In particular, students who learned new technical skills or college student norms and values as part of their College Now experience tended to change their role conceptions. Likewise, students who engaged in role rehearsal as part of their College Now experiences were more likely than their peers to shift their understandings of the role of college student.

Although the hypothesized model of dual enrollment was supported by the findings, the support should be tempered somewhat. As initially proposed, the model predicts that dual enrollment will lead to a variety of normative role-related demands, including navigating complex social spaces and bureaucracies; taking responsibility for their actions and academic

progress; not getting lost in a crowd; and engaging in new teacher-student relationships. The findings indicate that role-related learning is more limited, at least in high school-based dual enrollment. Though students did learn to take responsibility for their academic progress, they were not exposed to other normative demands. In particular, they were not expected to navigate new social spaces or bureaucracies.

Outside of their dual enrollment classroom, students were not subject to new social relationships or normative expectations. And since dual enrollment was only a small part of their day, students were not widely expected to engage with the role. This limited their opportunities for learning about the role. Though they had more exposure to the role and its expectations than their non-dually-enrolled peers, dual enrollment did not fundamentally alter participants' overall social locations or expectations. Thus, the impact was smaller than the original model implied.

Additionally, the model did not pay attention to dosage or course authenticity. The findings indicate that these things need to be taken into account. First, as has been emphasized, the authenticity of a course was strongly related to student outcomes. Merely renaming a high school course "college" is not enough to create role-related learning. Instead, dual enrollment must replicate the academic demands placed on college students in order for high school students to learn about the role.

A more refined model of dual enrollment emerges from these findings. Dual enrollment still can be reconceptualized as a social intervention that might encourage student persistence in postsecondary education by serving as a location in which students learn about the role of college student and integrate the role into their self-concepts. In particular, dual enrollment—particularly if taken over the course of multiple semesters—helps students learn the academic demands of the role, including the normative classroom expectations held of college students.

By enabling participants to practice the academic demands of the role in a limited capacity, dual enrollment programs help students come to understand that high school and college classrooms are different. Thus, upon college matriculation they should be able to meet academic expectations in ways that help them earn good grades and feel confident in their abilities, thus persisting in postsecondary education.

The impact of dual enrollment on students' role-related understandings stems from dual enrollment's ability to allow students to experience, first-hand, the academic demands of college courses, thereby learning about and practicing engaging in those demands. They also receive

feedback from role alters on their role-related performances and, in the process, develop a realistic—rather than idealistic—understanding of what being a college student entails. This is dependent, however, on a well-implemented college course experience. Thus, not all dual enrollment courses can be expected to lead to the hypothesized outcomes. Still, it is not unreasonable to conclude that dual enrollment may help students succeed in college and that, if the goal is encouraging role-related understandings rather than increasing academic skills, it might make sense to expand student access to such programs.

The findings have implications for dual enrollment programs nationally. As noted in the introduction, dual enrollment is an increasingly popular intervention, as it is assumed that dual enrollment students are more likely than their peers to matriculate and persist in postsecondary education. As a result, these programs are spreading rapidly, with significant government and foundation support. They vary significantly, however, in their structure and most likely in their quality.

The findings presented here should present a cautionary tale for those seeking to expand dual enrollment as quickly as possible. There was a clear relationship between students' role-related learning and course authenticity. Students in College Now courses that closely reflected the structure and demands of courses on the college campus were very likely to learn about the college student role, while students in inauthentic courses were unlikely to do so. The relationship between course authenticity and student outcomes was one of the strongest relationships found. If the goal of dual enrollment is to help students learn about the college student role—rather than merely to expose students to college-level coursework—close attention needs to be paid to the implementation of the dual enrollment course.

Just labeling a course “college” is unlikely to be sufficient for helping students to learn about the role. Moreover, academic rigor is not the only thing that matters. Instead, the course environment, the academic and interpersonal demands, and the style of instruction are important. Thus, high schools and colleges would probably do best expanding their dual enrollment offerings slowly, with close attention paid to quality and authenticity, rather than rapidly developing college-level courses that are not of high quality. The current policy and programmatic enthusiasm for dual enrollment may prod institutions to implement many courses at once; doing so without sufficient attention to authenticity seems unwise.

Dual enrollment programs should implement quality-control measures that ensure that high school-based instructors understand and are able to recreate the demands placed on regularly matriculated college students. In all likelihood, this is dependent upon close communication between college-based faculty and high school-based instructors. In most programs, this includes the hiring of instructors approved by the college and/or college-led professional development for high school-based staff. Strong involvement from the college sponsor of the dual enrollment program should encourage such activities.

College Now does include both of these quality-control measures. The colleges' academic departments hire the high school-based instructors, and the colleges also offer ongoing professional development for College Now instructors. And yet, the authenticity of College Now courses varied significantly across the sample. The result was that students had variable opportunities to engage with the college student role, and not all students were able to learn about the role in realistic and meaningful ways.

One problem may be that the role of college student is diffuse and not always well-understood by high school instructors.<sup>8</sup> High school-based instructors often think they are recreating a college environment but are unaware of the actual demands of college courses. They rely on their own experiences in college as a guide, but, given the lack of connection between high schools and colleges, are not aware of the current expectations of the college student role. Dual enrollment program staff should determine what, exactly, is entailed in the role of college student and communicate these expectations to dual enrollment instructors. They should also help high school-based instructors develop strategies to ensure that these demands are placed on dual enrollment students, and engage in continual monitoring of dual enrollment courses in order to ensure authenticity.

In addition, when high school teachers teach College Now courses, they may retain their primary identity as high school teachers, rather than enacting a college professor identity.<sup>9</sup> These instructors are certified high school teachers, who are teaching a full load of high school courses. Teaching a college course is only a small part of their professional duties, and therefore they may

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<sup>8</sup> One could argue that college-based instructors also do not always understand the role of college student, and that the expectations placed on regularly matriculated college students also vary widely. However, if the goal of dual enrollment is to prepare students for the actual demands of college, then it seems that dual enrollment courses should serve as best-case scenarios, where students are exposed to the most typical and realistic demands of the role. Otherwise, dual enrollment will only reinforce the idea that college is not very different from high school.

<sup>9</sup> I thank Aaron Pallas for this point.

retain many characteristics of high school teachers even when teaching a college course. The unintended consequence is that College Now instructors may continue to place high school demands on their students, rather than college demands. Thus, dual enrollment programs should be attentive to the teachers' identities and the ways that those identities are enacted in the classroom. By helping instructors to see themselves as college professors, dual enrollment programs may be more likely to encourage students to increase their college student identities.

Dual enrollment may be more effective in helping students learn about the role of college student if courses are held on a college campus or taught by regular college faculty. In particular, holding dual enrollment courses on a college campus could eliminate some of the barriers to creating course authenticity that come from the high school environment, such as stringent security or arbitrary rules. Logistically, college-based models of dual enrollment are more difficult to implement, however. And, as the English 101 and Psychology 101 instructors demonstrated, course authenticity can be achieved in the high school environment. The key, then, seems to be finding ways to encourage high school-based dual enrollment instructors to create a dual enrollment course that closely mirrors the demands of the same course on a college campus.

Finally, the findings make clear that the dual enrollment environment can only do so much. Students' perceptions of their dual enrollment course were strongly related to their role-related learning, and these perceptions were independent of the authenticity of the course environment. In other words, no matter how closely dual enrollment adheres to the demands of a campus-based college course, some students may not perceive it as such and, as a result, will be unlikely to increase their role-related understandings or identities.

The importance of students' interpretations of their experiences reminds us that educational interventions are not guaranteed. Even well-implemented programs are subject to uncertain outcomes. Thus, policymakers and educators should not expect dual enrollment—or any single intervention—to be the one answer to low levels of student persistence in postsecondary education. Dual enrollment may help some, or even many, students enter and succeed in college, but it cannot be the only program seeking to do this. Other students may respond better to other interventions.

## Directions for Future Research

The findings presented in this paper also have implications for future research. First, the sample in this study was small, so the tentative support given to the hypothesized model needs to be substantiated with a larger group of students. The bigger question, of course, is whether students who participate in dual enrollment are more likely than their peers to persist in postsecondary education and, if so, whether their persistence is due to their role-related understandings and identities. Thus, future research should test the model to determine if role-related learning leads to the intended outcomes of dual enrollment—college persistence and degree attainment.

In testing the model, researchers should be attentive to a number of outstanding questions. A key question is the influence of normal maturation in the findings presented here. How much of students' role-related learning is due to dual enrollment participation, and how much is due their status as high school juniors and seniors? Might students learn about being a college student without dual enrollment, because they are at a time in their lives when “college student” is a salient future role? The influence of maturation, as well as non-dual enrollment experiences, should be isolated from dual enrollment impacts.

In addition, it would be interesting to explore the influence of social class on the applicability of this model. All of the students in this sample were from immigrant or working class backgrounds and attended overcrowded schools with few resources dedicated to helping them prepare for college. Thus, the influence of College Now on their college-related learning may have been more pronounced than it would be for more advantaged students. Students from higher socioeconomic strata may have other opportunities to learn about the role of college student, and to integrate the role into their sense of self, and thus the model developed here might be less applicable. And the influence of dual enrollment on even more disadvantaged students may differ from the influence on students in this sample, as they might have even fewer opportunities to develop college student identities. Thus, the place that socioeconomic status should hold in the model presented should be explored by future research.

Finally, future research should focus on the range of implications these findings have for program implementation. For how long should students participate in dual enrollment in order to develop role-related understandings that can help them persist in college? How can programs

ensure that dual enrollment courses are authentic? Does dual enrollment lead to different forms of learning than other credit-based transition programs, such as AP or the International Baccalaureate program?

The findings from this study demonstrate that when well-implemented, dual enrollment might encourage student matriculation and persistence in postsecondary education. As such, it provides support for policymakers' and educators enthusiasm for the intervention. However, expansion of dual enrollment should be conducted in a way that is attentive to course authenticity, since this is a key variable in creating the role-related learning experienced by most of the students in the sample.



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