COMMUNITY COLLEGE OF PHILADEPHIA	
Developmental Education:	
New Pathways for	
Student Success at	
Community College of Philadelphia	
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	2011

Introduction

President Obama set an ambitious goal for the United States to be the leader in college graduation rates by 2020. Based upon Hecker's (2005) employment forecast which projects more than 63% of all U.S. job openings will require at least some postsecondary certification or associate, baccalaureate, or graduate degrees by 2014, the goal is imperative. However, there is a glaring impediment in higher education to the attainment of that goal. Mullin and Phillippe (2009) report, "Full-time enrollment at U.S. community colleges increased 24.1% in a 2-year time period from fall 2007 to fall 2009" and the majority of those students are in need of developmental education.

Therefore, Bailey and Cho, (2010) of the Community College Research Center (CCRC), emphasize the need for reinventing developmental education,

It will be very difficult to meet the Obama administration's goal of increasing the number of community college graduates by 5 million by 2020 without making significant progress on improving outcomes for students who arrive at community colleges with weak academic skills.

Bailey and Cho (2010) stress "addressing the needs of developmental students is perhaps the most difficult and most important problem facing community colleges" (p. 1). According to the CCRC, "Less than one quarter of community college students who enroll in developmental education complete a degree or certificate within eight years of enrollment in college" (Bailey and Cho, 2010, p. 1). As the CCRC states, "Not surprisingly, developmental education completion rates are negatively related to the number of levels to which a student is referred. In

other words, the farther below college level a student begins the less likely they are to complete the developmental sequence" (Bailey, Jeong and Cho, 2010).

The complexity of obstacles that developmental education students face stem from a variety of factors. Gallard, Allbriton and Morgan (2010) point to race, gender and socioeconomic status as factors related to college success and degree attainment. These in combination with factors such as poor previous educational experiences and work and family issues create a complicated set of circumstances for these students to overcome. For example, young adult students may possess the reading, writing and math skills but not have adequate study skills to meet the increased intellectual demands of college work. On the other hand, older students may possess the maturity and motivation that they need to succeed in college but lack the writing skills to successfully complete a college paper. First generation students face challenges in understanding college culture and vocabulary that require tailored solutions. Edgecombe, (2011) refers to the obstacles that students face when they enter college as the "multiplication principle", which "describes how students are shed at each level of the sequence, diminishing the pool of students that ultimately persist to the college level" (p. 1).

The traditional models of developmental education are not retaining students but instead allowing them to "leak" from the pipeline. The loss of potential workers and the costs associated are great. Vandal and the Association of National Governors (2011) report that "an analysis done by Strong American Schools estimated that remedial education costs states and students up to \$2.3 billion annually" (p. 1). Hughes and Scott-Clayton (2011) question, "if developmental education does not improve outcomes, is it because the "treatment" is broken per

¹ Developmental sequence refers to a "process that begins with initial assessment and referral to remediation and ends with completion of the highest-level developmental course" (Bailey, 2010, p. 1).

se or because the wrong students are being assigned to it? Or is some different or additional treatment required?" (p. 2).

According to *Achieving the Dream* (2011) little progress has been made, on average, among the twenty six community colleges who participated in the nationwide initiative since 2005. However, a few community colleges (such as El Paso Community College)² have made significant progress in student persistence and success rates. The contrast between the progress at individual community colleges and the continued systemic failure of community colleges nationwide illustrates the central point of this paper – fixing developmental education requires a systemic, multi-faceted approach based upon new and innovative best practices.

Developmental Education Best Practices

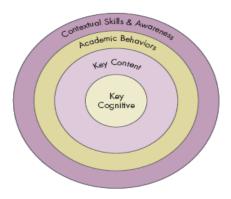
While there is little progress of student success while in developmental education, some new research and literature indicates some promising best practices that are revamping the methods of implementation and delivery. Since community colleges are open access, the first step in a student's college experience is assessment for course placement. Recent research states, however, that these tools are only "weakly predictive" of college success. In Assessing Developmental Assessment in Community Colleges (CCRC Working Paper) Hughes and Scott-Clayton (2011) found:

While the COMPASS and ACCUPLACER exams have some predictive value, incorporating multiple measures may improve these predictions further. Traditional assessments may not provide sufficient information to determine which course of action will lead to academic success because students arrive in community colleges underprepared in many ways—not only academically.

² El Paso's progress in the increasing retention and success rates will be discussed in more detail later in this paper.

Conley (2007) redefines college readiness as possessing additional components of key cognitive strategies: reasoning, precision; key content: academic knowledge; academic behaviors: self awareness, self monitoring and self control and contextual skills and awareness: "privileged information necessary to apply successfully to college, gain necessary financial aid, and then, subsequent to matriculation, understand how college operates as a system and culture" (p. 26) (Figure 1 – Adapted from Conley, 2007).

FIGURE 1: FACETS OF COLLEGE READINESS



Conley's definition fills the void between "college-eligible and college-ready" (p. 26).

El Paso Community College³ instituted a college readiness protocol which is showing promising results. The El Paso program components include a comprehensive orientation about the ACCUPLACER for students and their parents, an opportunity for students to take the test, review of the scores, interventions that focus on skill-building and then retesting, and a summer bridge program. College level placements at El Paso have increased and developmental placements have decreased since the program started.

³ El Paso Community College and Community College of Philadelphia have significant similarities and some important differences. El Paso serves over 30,000 students annually and employs 2,900 persons total. Around 60% of the students are part-time, about 60% work while taking classes most are first generation college students and 60% are Pell Grant Recipients. However, El Paso's demographics are different. El Paso's student population is about 86% Hispanic, 8% White and 2% Black.

Accelerating students through developmental education is also noted as a best practice. Baltimore County Community College's (BCCC) Accelerated Learning Project (ALP) places small groups (eight developmental students) into college-level English (with twelve college-level students). The eight students attend the college level class followed by an additional session right after that class ends – with the same professor. This additional class further extends and strengthens their learning. Jenkins, Speroni, Belfield, Jaggars, and Edgecombe (2010) found that compared with non-ALP students, ALP students complete both the introductory college-level course and the subsequent college English requirement at a higher rate and attempt more college courses.

Rutschow and Schneider (2011) cite contextualized instructional models as a best practice and define it as a "focus on teaching basic skills in reading, writing and math in conjunction with other course content, giving special attention to students' own personal experience or learning goals." These models are "thought to be particularly promising for helping academically underprepared students engage more quickly with their academic or vocational field of interest." Examples of successful contextualized learning programs include Washington's I-BEST program which has increased retention rates and progress into credit-bearing courses along with a host of other positive measures.

Community College of Philadelphia

At Community College of Philadephia, approximately 70% of all new degree seeking students must take at least one developmental course in reading, writing or math before they can enroll in college-level courses. Approximately one-third of these students leave the College without taking a single college-level course. The remaining two-thirds struggle with the college-

level gatekeeper courses such as English Composition (English 101) and Intermediate Algebra (Math 118) that they must pass before advancing any further in their collegiate studies. Finally, according to the National Community College Benchmark Project: Peer Institution Comparison Report (2011) only 10.6% of the students who enroll at CCP graduate⁴.

To lead the effort of improving student success and to systemically re-conceptualize developmental education at CCP, the Academic Master Plan (2010-2013) charged the Director of Developmental Education with convening a Developmental Education Think Tank and to "produce a white paper on developmental education" (p. 28). A variety of stakeholders, internal and external to the College, met from January to June, 2011, to review, analyze and discuss developmental education at CCP. (Appendix A)

Think Tank topics ranged from best practices in pre-enrollment to language proficiency and from adult basic education students to the intricacies of learning math. The Think Tank members read and discussed best practices and grappled with the fit between a given practice and CCP's particular context, since even the most effective best practice cannot be imported wholesale into a new context. Rather the practice must be examined and adapted to fit the new environment.

Think Tank members were invaluable in the creation of this white paper. In addition, this work is also informed by the knowledge of the Director of Developmental Education at CCP, along with conversations with colleagues in the field and participation in key conferences:

Achieving the Dream 2011, the Gateway to College Innovation Collaborative and the American Association of Colleges & Universities High Impact Practices Institute.

⁴ This statistic is based upon long-term persistence: defined as first-time, full-time students who earned a degree or certificate within three years from the fall 2007 cohort.

This paper follows the language and structure of *Unlocking the Gate: What We Know about Improving Developmental Education* (2011), a recent MDRC publication authored by Rutschow and Schneider. In that work, the authors discuss ways to assist students in <u>avoiding</u> developmental education, in <u>accelerating</u> through developmental education, in services that <u>support</u> students and in <u>contextualizing</u> instruction. This section is divided into four parts: avoiding, accelerating, supporting and contextualizing. As Rutschow and Schneider point out, those four areas are the most robustly supported by the research literature, particularly, acceleration and contextualization. These four areas will be a blueprint for systemic change in developmental education at CCP.

Avoiding Developmental Education

Rutschow and Schneider (2011) state that avoiding developmental education requires strategies "to identify academically underprepared students before they enter college and to provide extra instructional supports to get them 'up to speed' in order to bypass developmental education coursework" (p. 13). At Community College of Philadelphia the first step in assisting students in avoiding developmental education is to change how we describe the COMPASS placement test to prospective students. The test is currently described during the admissions and testing process and on the website as "not a pass-fail" test. Students are not informed about how the placement test results are used. This language and lack of information seems to lull students into the false belief that the results do not really matter but nothing could be farther than the truth. In fact, poor test scores can delay a student's entry into credit-bearing classes by two semesters or more. Communication about the placement test results needs to clearly state that

poor scores will result in provisional college acceptance and placement in Level 1 Workshops. With clearer communication, students will possess factual information so they can better understand the realities of placement in courses. Clearly, this method of avoiding developmental education involves *score* remediation rather than skill remediation. In other words, clearly explaining the consequences of a low score may help students take the test more seriously and thereby increase their scores. Obviously, this would not affect a prospective student's reading, writing or math skill level – it would merely alert students to the fact that the COMPASS placement test is a high stakes test and potentially motivates them to put forth their best effort in order to avoid or minimize the time spent in developmental education courses.

A second approach to assist students in avoiding developmental education is to aggressively publicize the different ways that students might prepare for the test. For example, the CCP website has a hyperlink to a COMPASS tutorial on the test publisher's website. However, the link on the CPP website is very difficult to locate. By adding a pop-up window on the test registration page, students could be directed to the preparation available on the ACT website and encouraged to take advantage of the information and practice tests available. Ideally, this would be a mandatory activity completed before students could register for the COMPASS test.

Another potential initiative is the implementation of a COMPASS preparation workshop. The ideas explored and piloted by a group of Leadership Institute members (2008-2009) could form the basis for creating a two to three hour workshop that would assist prospective students in 1) understanding the importance of the placement test; 2) gaining knowledge about the reading, writing and math skills tested on the COMPASS; 3) acquiring resources so that they can continue to enhance their skills.

As a final step toward assisting students in avoiding developmental education, rising juniors in high school could be provided the opportunity to complete the COMPASS placement test. The students who participate in the program would still have time for skill development in high school before retaking the COMPASS test (two years later) as they enter CCP.

Implementing a program similar to El Paso Community College requires increased collaborative effort among Admissions, Assessment, the Division of Adult and Continuing Education and Developmental Education. A fully integrated program could best be implemented in stages.

Accelerating Developmental Education

Acceleration is one of the most rigorously researched and promising tools for moving students through developmental levels. Rutschow and Schneider (2011) describe acceleration as interventions that "focus on compressing developmental education courses into shorter sequences in an effort to help students move as quickly as possible into college-level or professional-technical courses" (p.14). Key acceleration strategies include the modularization of traditional developmental courses, or 'fast-track' courses, that provide instruction in compressed time periods.

Community College of Philadelphia has conducted accelerated Writing workshops since 2008, Reading workshops since January, 2011 and Math workshops, since Summer 2011. The reading and writing workshops are 5 weeks and assist Level 1 (see Appendix B) students in improving their placement test scores so that they can enter developmental English or above. The reading and writing workshops also feature 3 week repeater's workshops for those students

who do not improve their placement scores after the 5 week session. The Math workshops are also 5 weeks and assist students who place into the lowest level of developmental math to improve their placement test scores to the higher level developmental math or higher. The math workshops do not have 3 week repeater's workshops. The attendance, tardiness and homework policies are very strict within the workshops. Students are dropped from the program after their fourth absence and for chronically not doing the homework. Classes meet 2 hours a day/3 days a week for 5 weeks – for a total of 30 hours of instruction.

Writing Workshops

The Writing workshops were piloted with thirteen sections in 2008. Students who complete the writing workshop are then eligible to retest, and if they place at the developmental English level, they are officially accepted into the College. Of the 153 students who completed the workshops and were eligible to retest, 64 (42%) improved their English placement to higher level developmental English course.

Since 2008, over 1,500 students enrolled in the five-week writing workshops (fall 2008 to fall 2010). As the chart below illustrates, 229 students (15%) never attended and 285 students (19%) were dropped from the workshop. Of the 1010 students who participated in the workshops and 984 (65%) were eligible to retest which resulted in 484 (48%) improving their English placement to at least developmental level.

No.of	No.	Never		Eligibleto	Retested	Improved
Sections	Enrolled	Attended	Other Drops	Retest		Placement
74	1524	229 (15%)	285 (19%)	1010	984 (65%)	484 (48%)

In the fall of 2008, Repeaters' Writing workshops were introduced to provide students who did not improve their placement an additional three weeks of instruction and another

opportunity to retake the writing segment of the placement test. As the chart below highlights, (fall 2008 to fall 2010) 404 students enrolled in the repeaters' writing workshops. 44 students (11%) never attended and 51 (14%) students were dropped. 309 students participated in the workshops and retested. 129 students (42%) improved their English placements to a higher level developmental English course.

	No. Enrolled		Other Drops	Eligible to		Improved
Sections		Attended		Retest		Placement
33	404	44 (11%)	51 (14%)	309	309 (75%)	129 (42%)

Math Workshops

In 2009, the College added Math Preparation Workshops. Students used the ALEKS software published by McGraw Hill with the assistance of an instructor and had a mandatory 1-hour lab session per week. There were no supplementary print materials given to students.

Three Math Workshops were conducted in 2009 and one in 2010. Fifty students enrolled in four sections. Only 25 students were eligible to retest, resulting in 15 students improving their Math placement. One student placed into Intermediate Algebra while the remaining students placed into Elementary Algebra.

ľ	No. ofSections	No. Enrolled	1	Eligible to Retest		Improved Placement
	4	50	25	25	24	15 (63%)

In the fall of 2010, the College received a Predominately Black Institutions (PBI) grant that, among other programs, funded four Math Workshops that were held in the summer of 2011. In Summer I, 51 students enrolled in the workshops and 41 students were eligible to be retested. Of those students who retested, 28 (69%) improved their placement.

No. of Sections	No. Enrolled		Eligible to Retest		Improved Placement
2	51	8	43	41	28 (69%)

Reading Workshops

In the spring of 2011, the College implemented Level 1 Reading Workshops. Students used <u>The Reader's Edge</u> (McGraw-Hill) and also read <u>The Pact</u>. Thus far, the Reading workshops are very successful, with 70% of students that are eligible and retested, improving their placement level.

No. of Sections	No. Enrolled	**	Eligible to Retest		Improved Placement
16	352	115	237	223	157 (70%)

Overall success rate in Writing of 48%, Math of 63% and Reading of 70% indicate that accelerated workshops are strong components of the developmental education program at CCP. The Writing workshops, even though indicating success, will be revised in collaboration with instructors in 2011-2012 to create a cogent and comprehensive guide to writing improvement beyond the current grammar remediation. The math workshops will benefit from supporting infrastructure and systems for student recruitment. In addition, rather than using the ALEKS software, the workshops will use the Pearson MathLab product already in use by the Math Department.

The Developmental Education program will explore creating a "College Student 101" seminar within the workshops. Instructors often informally assist students in understanding the systems they will have to navigate at CCP and give them tips on negotiating those systems. A supplementary seminar which codifies those informal tips would be of great benefit to workshop

students. Finally, the progress of workshop students through developmental English and Math courses and into credit-bearing courses must be carefully tracked. Workshops yield short-term gains - students improve their placement test scores and enter the next level of developmental education. Long-term success rates of those students are being tracked to assess outcomes.

Accelerating Developmental Education: Non-cognitive Assessment

Discussions during the Think Tank indicated that the COMPASS test is "too blunt" to correctly place students. National and local criticisms point to a need to augment COMPASS test results with an additional measure that will give a better-rounded picture of the student.

Toward that end, the Developmental Education Program can work with the Assessment Center to pilot a non-cognitive assessment that could be given along with the COMPASS test to improve the knowledge related to college readiness as defined by Conley (2007).

In the summer of 2011 the Developmental Education staff, in cooperation with CCP"s TRIO-Student Support Services program and the Center for Male Engagement piloted an on-line remediation program to see if students would place higher, if they were provided with an on-line supplemental remediation tool. Students participated in an on-line remediation program with Pearson's MyFoundations Lab. Pearson has correlated COMPASS competencies with the topics in MyFoundations Lab. The results from this small pilot project are promising, particularly for reading remediation with 80% of the students improving their reading scores on the COMPASS. However, only 40% of the students improved their reading placement level. Results for writing remediation were mixed with only 20% of the students improving to English Composition. The results of this pilot indicate that some students (perhaps highly motivated) are able to remediate

in an on-line environment. A high non-cognitive score should indicate high motivation and the aptitude to successfully complete independent work. This online remediation program would be independent and students would pay Pearson directly for access to the website. Reading Area Community College is running a developmental reading program of this nature – with anecdotal promising results.

Likewise, a non-cognitive assessment could also assist in placing students, who score higher into the next level of English at CCP. For example, workshop students with high non-cognitive scores could be given the option to enroll in a higher level developmental English course and students who place into developmental English could be given the option to enroll in English Composition. This program would be similar to the Accelerate Learning Project (ALP) successfully implemented by Baltimore County Community College.⁵

Support for Developmental Students

Community College of Philadelphia offers a variety of student support activities - tutoring and workshops in the learning lab, library services, student academic computing centers, and Freshman Orientation Seminar (FOS), a one credit student success course that has been successfully implemented for any student that chooses to take the course. Building on the success of FOS, a team of learning lab faculty are now developing a new, expanded student success course, tentatively titled First Year Investigation: Philadelphia. This three credit course would integrate academic content related to the City and student success curricula such as study skills, test-taking skills, and time management. Student assessment and course evaluation needs to be highly structured and framed. Through FYI: Philadelphia students will be offered an

⁵ Described on page 5-6 of this paper

exciting and relevant course for which they can gain college credit and learn the soft skills mentioned above at the same time. The course will light students' intellectual fires.

The *Achieving the Dream* research on learning communities is mixed. Learning communities have been described as a life raft in the middle of the college ocean that keeps students afloat for that semester but has been found to have little long-term impact on student success. On the one hand, having a life raft when you're in the middle of an ocean is a good thing. On the other hand, the number of students impacted for one semester must be weighed against the cost of the life raft.

To assess and track information related to learning communities, CCP obtained the Innovation Collaborative grant through the Gateway to College National Network. The funding supports faculty in linking courses and creating intentional learning communities for students. In Fall 2011, four faculty members are linking two sets of classes: Math faculty are linking a section of developmental math with a section of FOS. Similarly, English faculty are linking a section of developmental English with a section of FOS. The professional development and collaboration time are extensive within this project. Collaborative members spent five days in retreats and other activities designed to help integrate their course syllabi and assignments. The next stage of the project will include "scaling up" the project to include four more faculty members with linked classes and learning communities in the next year. It is important to point out that one of the large benefits of the Innovation Collaborative is the amount of professional development and collaboration that the project members have participated in as they continue to be a part of the project. We will track the impact the Innovation Collaboration has on students and faculty as we move forward.

Contextualization

Implementing a contextualized program at CCP could be a long-range goal to accomplish over the next few years. Steps along the way include: researching Philadelphia workforce and industry needs in order to design a program that responds to the region's high priority occupations. Second, collaborative networks inside and outside the College must be created between divisions of the College and with the Philadelphia Workforce Investment Board, the Career Links, and adult education organizations. Curriculum development, building the infrastructure and systems for the program, piloting and implementing will comprise the final steps.

In addition, a pipeline from local adult education programs and literacy programs to CCP can be organized through already established connections. State and federal mandates on adult education programs requires adult education and literacy programs to emphasize post-secondary education for their population. CCP can enhance, the already built pipeline, to address a wider scope of students and most certainly include services with understanding how to avoid or accelerate through developmental education.

Conclusion

The inclusion of the best practices in developmental education, whether related to avoiding developmental education altogether, accelerating through courses, supporting students' as they complete the sequence, or offering contextualized instruction, will increase the retention and success rate of developmental education students at Community College of Philadelphia by at least 10% by 2016. In order to accomplish this goal, the College needs to review the resources (staffing and funding) necessary to support these initiatives.

The proposed timeline is outlined below. Although not explicitly listed on this chart, the data and outcomes from each initiative would be analyzed and assessed at each phase of implementation. The data and outcomes analysis would be used to "fine-tune" each initiative and to make decisions about continuing or discontinuing projects.

	Avoid	Accelerate	Support	Contextualize
2011/2012	Enhance communication about COMPASS placement test Enhance pipeline from adult ed and literacy to CCP Publicize on-line link to COMPASS preparation	Continue Reading and Writing Workshops Develop infrastructure for Math workshops Establish on-line remediation program.	First Year Investigation Course developed by Learning Lab faculty Continue Innovation Collaborative	Research courses and programs that have existing contextualization at CCP. Analyze data related to effectiveness.
2012/2013	Explore monthly COMPASS preparation workshops. Build infrastructure and collaborative structures for administering COMPASS to rising high school juniors.	Implement Math 016 workshops Select and pilot non-cognitive assessment Students that score at a higher level on the non-cognitive assessment will be eligible for on-line remediation and assess results.	Implement First Year Investigation Course. Continue Innovation Collaborative and examine data & outcomes.	Establish connections with faculty about further contextualization at CCP.
2013/2014	Pilot monthly COMPASS preparation workshops and assess results. Pilot COMPASS to rising high school juniors at key charter	Pilot 101 Acceleration program – Students that score at a higher level on the non- cognitive assessment will	First Year Investigation Course Could be mandatory for Level 2 (ENGL 098 and ENGL 099)	Pilot embedding basic skills with a CCP college level course.

	schools.	be eligible for on-line remediation or placement into a higher level course and assess results.	developmental education population. Assess Outcomes of First Year Investigation Course. Report Outcomes of First Year Investigation Course of Course Investigation Course	
2014/2015	If successful, continue monthly COMPASS preparation workshops and assess results. Follow up assessment of COMPASS Pilot at key charter schools. Pilot COMPASS to rising high school juniors at archdiocesan schools	Continue acceleration program – Students that score at a higher level on the non- cognitive assessment will be eligible for on-line remediation or placement into a higher level course and assess results.	First Year Investigation Course continues Could be mandatory for Level 2 (ENGL 098 and ENGL 099) developmental education population. Continue Assessment Outcomes of First Year Investigation Course.	Expand pilot of contextualization and continue to assess results.
2015/2016	Follow up assessment of COMPASS Pilot at key charter schools and archdiocesan schools. Pilot COMPASS to rising high school juniors at Philadelphia School District	Acceleration program – Students that score at a higher level on the non- cognitive assessment will be eligible for on-line	First Year Investigation Course continues Mandatory for Level 2 (ENGL 098 and ENGL 099) developmental	Expand pilot of contextualization and continue to assess results.

	Report on Developmental Education will be issued and will include the progress related avoiding developmental education.	remediation or placement into a higher level course and assess results. Report on Developmental Education will be issued and will include the progress related to accelerating students through developmental education.	education population. Continue Assessment Outcomes of First Year Investigation Course. Report on Developmental Education will be issued and will include the progress related to support for developmental education students.	Report on Developmental Education will be issued and will include the progress related to contextualization.
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At CCP's Professional Development Week in August 2011, the President of Community College of Philadelphia, Dr. Stephen M. Curtis, emphasized the need for progress in developmental education.

The challenge I leave with you today is that in one year's time we should have in place a more comprehensive set of offerings with multiple pathways for the developmental education student. Accompanying these new pathways should be a continuing commitment to evaluate the effectiveness of these strategies and of the overall developmental education curriculum.

Support and leadership from the highest level at CCP is critical to instill campus wide, positive expectations for student success. With the lack of success nationwide in developmental education, it is tempting to accept that CCP students will not succeed and more insidiously, that there are limited options for students to remain at the college and succeed. Systemic reform of

developmental education at CCP will require change in these beliefs and expectations. With the implementation of new, cutting edge initiatives, the college can once again embrace the idea that our students can and will succeed.

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Appendix A

Developmental Education Think Tank Members - 2011

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Fred Dukes, Associate Professor Counseling CCP

Malissa Farrish, Academic Advising Specialist, CCP

Suzanne Felix, Assistant Director Corporate College, CCP

Diane Inverso, Education Director Mayor's Commission on Literacy

Cindy Giddle, English Department Chair, CCP

Sandy Harrill, Director of Developmental Education

Jamece Joyner, Senior Associate Philadelphia Workforce Investment Board Luke Kasim, Former Director of Admissions, CCP

Yvonne King, Coordinator of Developmental Education, CCP

Mike McGeady, Coordinator Assessment Center, CCP

Joan Monroe, Assistant Professor Learning Lab, CCP

Hadass Sheffer, Executive Director Graduate! Philadelphia

Susan Tobia, Assistant VP Academic Affairs, CCP

Brent Webber, Mathematics Department Chair, CCP

Ted Wong, Assistant Professor Learning Lab, CCP

APPENDIX B	ENGLISH and READING	
PLACEMENT LEVELS	COURSE EQUIVALENT	COURSE DESCRIPTION
Adult Basic Education (ABE)		GED/High School Proficiency Exam
1	5-week Workshops	The Workshops assist students with improving their skills in reading or writing. At the end of the 5 weeks, eligible students re-take the COMPASS placement test with the goal of improving their score in the reading or the writing section of the test and placing into English 098/099 or higher.
2	ENGL 098 Fundamentals of Writing ENGL 099 Reading Improvement	English 098 and English 099 are non-transferrable, developmental courses providing instruction and intensive practice in the development of academic reading and writing skills. Students who pass both parts will be able to take English Level 5.
3	ENGL 098 Fundamentals of Writing ENGL 108 Learning Across the Disciplines	English 098 is a non-transferrable, developmental course providing instruction and intensive practice in the development of academic writing skills. English 108 is a 3-credit course that provides instruction in adapting to the demands of the academic disciplines at CCP and four-year institution.
4	ENGL 098 Fundamentals of Writing	English 098 is a non-transferrable, developmental course providing instruction and intensive practice in the development of academic writing skills.
5	ENGL101 English Composition ENGL 108 Learning Across the Disciplines	English 101 English Composition I is a credit-bearing, transferable course that provides instruction in developing significant ideas in a sequence of well-ordered paragraphs with a minimum of errors. English 108 is a 3-credit course that provides instruction in adapting to the demands of the academic disciplines at CCP and four-year institutions
6	English 101 English Composition	English 101 English Composition I is a credit- bearing, transferable course that provides instruction in developing significant ideas in a sequence of well-ordered paragraphs with a

minimum of errors.

Mathematics	
COURSE PLACEMENT	COURSE DESCRIPTION
WORKSHOPS	
MATH 016 Arithmetic	This non-transferrable, developmental education,, arithmetic course covers operations on natural numbers, integers, rational numbers (fractions), decimals and percents.
MATH 017 Elementary Algebra	This non-transferrable, developmental education, course covers algebraic expressions; equivalent algebraic expressions; operations on algebraic expressions; linear equations and inequalities in one variable; and factoring.
MATH 118 Intermediate Algebra	Real numbers, polynomials, rational expressions, algebraic expressions, linear equations and inequalities in one variable, absolute value equations and inequalities, linear equations in two variables, graphs of lines, systems of linear equations in two variables, quadratic equations in one variable, problem solving.
MATH 161 Pre-calculus	Functions and relations and their graphs, transformations and symmetries; composition of functions; one-to-one functions and their inverses; polynomial functions; complex numbers; rational functions; conic sections. Prerequisite: MATH 118 with a grade of "C" or better.