



From Remediation to Graduation: Directions for Research and Policy Practice in Developmental Education

Sponsored by The Commission for Two Year Colleges

Monograph Authors

Patricia Munsch
Suffolk County Community College

Kenneth W. Borland, Jr.
Bowling Green State University

Adam Duberstein
University of Michigan-Flint

Marsha A. Miller
Kansas State University

Joe Gilgour
State Fair Community College

Melanie Warren
University at Buffalo

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Introduction

The future of developmental education is at risk. Questions about the access, affordability, and assurance of development education affect the external and internal politics, finances, and missions of institutions of higher education. Challenges associated with initiatives designed to ensure the inclusion and promote the academic success of underprepared students attending college include lower persistence rates, lower graduation rates and higher cost

per student. For example, some stakeholders suggest removing developmental courses from college offerings, others see these classes as essential to the mission of higher education. This publication introduces the various perspectives and responses to the debate on the future of developmental education and issues a call to action for developmental education advocates in future research, policy, and practice.

History of Developmental Education

Developmental and remedial education has not always been synonymous. In its earliest form, remedial education was considered a cure for students suffering from the defects of inadequate college preparation. The students needing remedial education, identified as early as 1874 by the faculty at Harvard University, lacked the competency to complete formal writing assignments. By contrast, at that time, developmental education was designed to help those students already enrolled in college level courses (Arendale, 2010), not those who lacked academic preparation for college level courses.

Created for students unprepared for college level courses, remedial education factored into successful college enrollments in the mid-19th century (Young, 2009). Many colleges, for financial purposes, allowed direct descendants of wealthy alumni to matriculate despite inadequate preparation. These students completed required course work that allowed them to compete with more prepared students. During the American Civil War, many southern universities lowered the age of enrollment, matriculating some as young as 12 years old, to substitute for the lost funds from students

joining the Confederate Army (Arendale, 2010). After the establishment of the Serviceman's Readjustment Act (or GI Bill) in 1944, military veterans gained access to postsecondary education. Many Veterans' socioeconomic status did not comport with that of previous college cohorts, began inundating the academy.

In 1947, the Truman Commission released "Higher Education for American Democracy," which changed *junior colleges* to *community colleges* and legitimized the mission and importance of 2-year college programs. It drew attention to the community college as a viable option for earning a postsecondary education (Beach, 2011). The focus was to provide education within the local community and increase access to individuals unable to relocate for college. Secondly, the shift in focus linked community colleges to the needs of the local communities, offering degrees to meet the needs of local employers. At the time many community colleges also provided remedial courses to open access to all members of the community

In 1954, the decision in *Brown vs. Board of Education of Topeka* (Patterson, 2001) made

segregation in public schools illegal, giving Black citizens new opportunities for learning. Often attending poor, dilapidated schools with unqualified teachers and miserable conditions many Blacks were unprepared for college level courses (Patterson, 2001). However, colleges with open door policies and remedial courses offered them enrollment.

Whether the origins of developmental education on any given campus was as the result of financial survival for schools (1800s), the link between the college and access for the local community (1940s and '50s) or necessity for specific disadvantaged cohorts (1960s), the final factor was the widespread breakdown of academic preparedness from secondary schools which first become evident in the 1960s. This coincided with the first wave of baby boomers attending college leading to more students attending college with fewer prepared to do so (Cohen & Brawer, 2008). Community colleges and remedial courses, which had existed for nearly the entire century, began to flourish.

According to Arendale (2010), the earliest remedial courses focused on reading and study skills to aid students with course materials, but they did not necessarily assist in learning a specific topic. Over time, community colleges undertook the responsibility of offering remedial courses in reading, writing, and math as part

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of their mission (Beach, 2011). The leadership of two-year schools were motivated by the federal programs such as the GI Bill, Affirmative Action, and like initiatives, while commensurately providing oversight and imposing expectations of program completion. In addition, an increasing number of students needed skill building courses in order to transfer to four-year institutions, and leaders in business and industry asked for remedial education as refresher courses for their employees (Arendale, 2010).

As a result, 21st century community colleges offer remediation in math, reading, and writing to ameliorate problems associated with poor academic preparation in secondary schools, lack of curriculum alignment between high schools and post-secondary institutions, challenges with student motivation for academic achievement and to bolster skills for nontraditionally aged students who return to school several years after leaving high school. Due to the stigma associated with remedial, community colleges adopted the term *developmental* education to convey a more positive view of those courses designed to help students gain college level proficiency (Diel-Amen & Rosenbaum, 2002). Community colleges offer developmental education in the form of noncredit courses designed to prepare students for college level for-credit courses.

Defining 21st Century Developmental Education

Open access constitutes, in part, the mission of many community colleges. A Community College Research Center study of over 250,000 students at 57 community colleges in the Achieving the Dream initiative found that 59% of entering students received referrals to developmental math and 33% were placed in developmental English (Bailey, Jeong, & Cho, 2008). Roughly 1.7 million students nationwide are enrolled in developmental courses (Kuczynski-Brown, 2012), making the debate over developmental education a hot topic. Developmental course work provides access to higher education for all students despite their academic history. Without these courses, some students could not be successful in college-level courses.

The National Association for Developmental Education (NADE) (n.d.) defined developmental education as programs and services that address “academic preparedness, diagnostic assessment and placement, development of general and discipline-specific learning strategies, and affective barriers to learning” (NADE, n.d., p. 3). Both traditional and nontraditional students can benefit from these programs and courses. For the traditional student entering college directly from high school but underprepared for college level course work, these courses offer assistance in skill development as part of the readiness process. Meanwhile, they offer nontraditional students who have been out of the classroom the opportunity to increase their skills before being placed directly into college level courses. Many institutions allow students to enroll full-time and complete their developmental courses while completing one or two college-level courses. Some institutions offer fast-track

developmental courses that allow students to take credit and noncredit developmental classes simultaneously; for example, a student can complete an English foundation module course and in the same semester finish a college-level composition course.

Many colleges rely exclusively on tests such as ACCUPLACER or COMPASS, from the College Board and ACT, respectively, to assess a student’s need for developmental course work. However, many higher education administrators wonder whether college-placement test results best determine a student’s need for foundation courses. According to a 2012 research study of a statewide community college system, use of high school GPA, not placement tests, would reduce the error rates in the placement system by one half across both English and mathematics (Belfield & Crosta, 2012).

More important than the debate over the means of placement, some administrators question the value of developmental course work on those deemed underprepared for college. The discussion revolves around the outcomes of developmental education and the question if such coursework provides adequate skill-building to prepare students for college level coursework. Students who are in need of developmental coursework are the most at-risk population for drop-out and stop-out and with continued pressure to increase graduation rates in community colleges removing developmental education and limiting access is one strategy to increase graduation rates. However, if community colleges want to continue to provide open access to all potential students, underprepared students need courses that support the development of their foundational academic skills.

The cost of developmental courses creates additional challenges for students and community colleges. The 2011 National Center for Education Statistics Digest of Education Statistics, Community College Research Center estimates the annual cost of college-level remediation at approximately \$7 billion (Scott-Clayton, Crosta, & Belfield, 2012). Many students bear the burden of the costs directly either through additional fees for developmental courses and/or an extended college career due to additional time to graduation. Community colleges that do not pass the cost onto the student must budget for additional faculty, additional course sections, and the limited seat enrollment, generally 15 students per section,

for most non-credit courses (Scott-Clayton, Crosta, & Belfield, 2012).

Developmental course work provides access and choice to students throughout the country. Without it, many traditional and nontraditional students would not attend college and thus not earn a degree. It helps students increase their sense of self-efficacy while supporting their academic pursuits. Developmental education is the great equalizer in higher education; it provides students with opportunities despite past academic performance. Thus, developmental course work proves critical for community colleges with missions focused on open-access and/or degree completion.

The Debate Surrounding Developmental Education

Specific legislative directions, position statements, and policies characterize the polarity and the middle ground within the debate about developmental education within postsecondary institutions. The thoughtful response from within the academy suggests new directions for developmental educators within the academy.

Positions and Policies

A variety of political and legislative interests in the future of developmental education, each driven by multiple motivations, has recently emerged in the form of statements, proposed legislation, and new state board policies. Groups such as Complete College America (2013) (CCA) have made recommendations to state legislatures about maintaining and enhancing developmental education within postsecondary institutions. CCA, established in 2009, described its work as “a national nonprofit with a single mission: to work with states to significantly

increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations” (CCA, 2014c). It has determined that states should consider the following essential features of reforms designed to graduate more students from college:

- Make enrollment in college-level courses the default pathway for many more students.
- Use a range, not a single cut score, for determining need for remedial coursework.
- Align mathematics to programs of study.
- Integrate needed support in college-level gateway courses by
 - offering single-semester co-requisite courses,
 - including one-course pathways,
 - offering parallel remediation (adapted from CCA, 2014b).

Despite the efforts of groups like CCA, Florida Senate Bill 1720 signals the removal of developmental education from higher education institutions. “Colleges by 2014 will no longer be able to require recent high school graduates to take the state’s standard placement test or to enroll in noncredit remedial courses” (Fain, 2013, p5). This change:

essentially pushes the responsibility for remediation back to the public K-12 system in the state. A 2011 Florida law made college placement testing mandatory for most 11th graders. High school students who don’t make the cut are required to take courses during their senior year that are designed to address remedial needs. (Fain, 2013, ¶ 6)

The Connecticut Public Act 12-40 (Connecticut Board of Regents of Higher Education, 2012) restricted developmental education by requiring that it be offered as part of entry-level courses or an intensive readiness program. In response, the faculties of colleges affected by the law created a three-level system with the following features, as described on the Regent’s website:

- College Level: College-level instruction; a course numbered 100 or higher
- Embedded Level: College-level instruction with embedded developmental support designed for students with 12th grade skills (or close to that) who are approaching college readiness but require some remediation; college-level components must be numbered 100 or higher.
- Intensive Level: A single semester of developmental education or an intensive

readiness experience for students below the 12th grade level; if structured as a course, must be numbered below 100.

Other states model positive changes to developmental education within higher education institutions. CCA (2014) points to Tennessee as exemplary of the desired reforms developmental education. For example, at the Tennessee Colleges of Applied Technology, “Mandatory computer labs run parallel with the highly structured curriculum to remediate students to meet the foundational skills needs of their programs of study” (CCA, 2013, p. 11). Also, Texas State University–San Marcos “allows students with math placement test scores in a range below but near the ‘cut score’ to enroll simultaneously in remedial math and one of two options—college algebra or college algebra with statistics—depending on their academic and career needs” (CCA, 2013, p. 11).

The call to action put forth by President Obama, referred to as the Completion Agenda, is the call for America to have the highest percentage of college graduates in the world by 2020. The American Association of Community Colleges furthered the call to action to community colleges by asking them to commit to increasing the number of college graduates by 50% by 2020 (Johnson McPhail, 2011). While these goals are laudable and will be of great benefit to society, it creates tension surrounding developmental education. Arguably, students in need of developmental coursework have longer time to degree completion which could negatively impact the number of community college graduates. In addition to the state interventions surrounding

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developmental education this federal call to action creates another negative relationship between the role of developmental education and the goals of the federal and state governments.

Responses Within the Academy

In public debate, educators and policy makers typically take one of two distinctly opposing positions when they consider the future of developmental education in two and four-year institutions. They either advocate for advancing developmental education course and program offerings, or they support retrenching them.

For example, in response to the CCA agenda, papers put forth by leading developmental educators such as Goudas and Boylan (2012) as well as Bailey, Smith, Jaggars, and Scott-Clayton (2013) counter critics of the field and of the appropriateness of developmental education within postsecondary institutions. Educators in the proponent camp champion the advancement of developmental education and argue for consideration of their philosophical, political, and practical rationale as means to advocate for developmental education as a discipline and an enhancement to students' academic success. Bailey (2009) noted that it is possible that academically underprepared students would have even less success if developmental education courses were not available. However, many inside the developmental education field are taking stock and changing course. Specifically, some, like Collins (2012), wish to move developmental education responsibilities squarely on K-12 schools or within adult basic education.

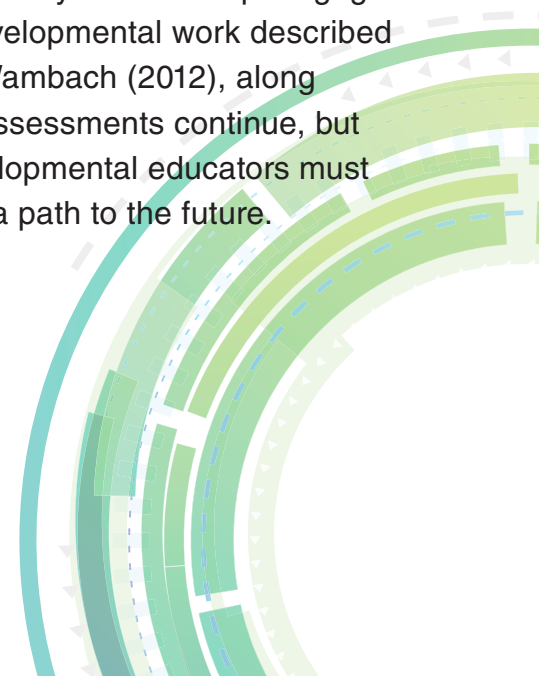
Brothen and Wambach (2012) pointed out that educators must become increasingly savvy toward research and policy (such as those

being debated) to “uncover primary shared goals and values” (p. 36) to assist the most academically disadvantaged students in higher education institutions. They illustrate with seven key concepts implemented by highly effective developmental educators:

1. Continue and refine literary skills development courses.
2. Vary course placement requirements based on student goals and program of study.
3. Develop a range of placement testing procedures.
4. Integrate alternative teaching/learning approaches.
5. Use theory to inform practice.
6. Integrate underprepared students into mainstream curriculum.
7. Adjust program delivery according to institutional type. (Brothen and Wambach, 2012, p. 36)

In addition, carefully crafted assessment strategies help institutional personnel determine the best ways for addressing students' learning and development as well as those that require adjustment to propel students from remediation toward graduation.

Within the academy, debate participants have relied on articulated arguments, but they now must act. Not only should the pedagogical and curricular developmental work described by Brothen and Wambach (2012), along with purposeful assessments continue, but professional developmental educators must commit to taking a path to the future.



Future Directions for Research, Policy, and Practice

While presently driven by the debate about developmental education within postsecondary institutions, a long-emerging need for new work by community college leaders and developmental educators has reached critical mass. Continued momentum requires more data-driven decision making, education of policy and decision makers, creation of stronger interfaces with faculty and advisor colleagues, and inclusion of college students who benefit from developmental education.

Data-Based Decision Making

Developmental educators should connect with assessment and institutional research colleagues skilled at translating both numerical and narrative data into contextually powerful messages for decision makers. Through these partnerships, educators can conduct research in learning and development-oriented pedagogical and curriculum design as well as assessment and institutional studies informed by many perspectives. Such initiatives insure that placement tests focus on skills and knowledge necessary for students to succeed in credit-bearing entry-level courses in mathematics, reading, and English. A particularly informative effort requires input of those responsible for placement and course evaluation across all disciplines. The curriculum within developmental education courses must address the skill sets needed in entry-level courses and for remediating those deficient competencies revealed in placement screenings.

Furthermore, assessment efforts should focus beyond placement numbers to reveal the characteristics of those who successfully completed their developmental, entry-level, and complete courses of study. Harding and Miller

(2013) recommended that institutions assess placement and success data through intentional questioning to stimulate discussion:

- Were placement scores for students not completing different from those who did? If they were [different], how were placement scores different from the scores for students who did complete?
- Was there a difference in the retention and completion rates for students academically underprepared in one or more basic skills areas when compared to students whose basic skills scored in the college-ready range?
- Were students in certain groups at risk of failure in particular courses? Look at the D, F, and withdraw rates for courses. In which courses did entering students have the most trouble? What academic support services exist to help these students succeed?
- What characteristics do students who succeed have in common as compared with those who do not reach their goals?
- What indicators stand out when looking at the group not retained?
- What characteristics did students not completing their program of study have in common?
- Were students who did not complete from common “feeder” schools? (p. 26).

With a variety of colleagues giving input, data may reveal interesting patterns that inform further investigation. For example, researchers may ask those who did not complete their program to give feedback regarding their experiences at the college. English and mathematics faculty members, backed with data from institutional research, may examine the

characteristics and specific skills of students who succeed in introductory college-level courses without developmental education preparation. The pool of gathered information may reveal the combination of factors common to students considered most at-risk that inform strategies used to connect them with needed services (Harding & Miller, 2013).

To maximize students' opportunities for success, advisors must then use this information to ensure that students are placed into the correct courses for both their aptitudes and interests.

On-campus stakeholders must show institutional effectiveness at determining placements and making transparent the basis for these practices.

Therefore institutional researchers and assessment professionals may assist decision makers in determining the appropriate data to inform student placement and ensure the correct questions and information are being incorporated into student placements by advisors. Faculty members and advisors, both in and out of the developmental education realm, must discuss introductory course content to help students bridge the transition between developmental and introductory course work. Additionally, faculty members from disciplines outside mathematics, reading, and English may consider partnering with developmental educators to make data-based decisions that promote student success in their courses. For example, a psychology department may require that students with a low placement score successfully complete a developmental

reading course before taking an introductory course because data suggest that students with weaker reading skills struggle in the class. To demonstrate objectivity and effective placement, such decisions must derive from appropriate institutional assessment.

Proponents can use these data and analyses to explain the need for maintaining and enhancing developmental education within institutions. Results of assessment may effectively highlight the relationship between developmental education and students' performance when compared to the retention rate of student peers who did not take developmental courses.

To ensure that the data are used to good effect, developmental education faculty members and advisors must insist on direct involvement in the decisions based on any assessment efforts. Those using the analyses must appreciate that scientifically, objective demonstrations (not anecdotes) persuade colleagues and ensure that developmental education efforts effectively help students overcome academic challenges and build upon their talents and skills before beginning introductory college-level work (Cross, 1976).

In summary, higher education developmental educators, policy makers, and institutional leaders cannot make the best decisions without the information provided by assessment and institutional research. Therefore, developmental educators must procure the appropriate data and offer effective analyses to promote developmental education for underprepared and underprivileged students.



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Educating Policy and Decision Makers

Contentious political perspectives complicate the emergence of a unified view of the role of developmental education. Effective communication with public officials and institutional decision makers must emanate from community college leaders and developmental educators. Armed with theoretical and practical knowledge supported by the assessment and institutional research described herein, these advocates must successfully educate and influence policy and decisions to improve their students' chances for success.

Among public decision makers, no one seems to agree upon the approach to integrate developmental educators' input with useful legislation. Therefore, community college leaders must tirelessly speak with both elected and appointed college trustees within their own institutions. They need to meet with civic organizations that host forums regarding educational issues and ask political candidates about their stances on the issues important to developmental education, such as funding and curriculum. Through advocacy, community college leaders make lawmakers familiar with the efforts to provide access and enhance the success of their constituents seeking higher education.

Although keeping in contact with government officials proves important, developmental educators can ill afford to ignore those higher education administrators who could serve as their greatest champions. Historically, unless raised by an external stakeholder or an internal fiscal or quality concern, developmental education issues rarely appear on the radar screens of leaders, and those who do recognize the need may have relatively little experience

with developmental education. To move developmental education to the forefront of campus executives' agendas, advocates must successfully communicate with chief academic officers and their professional associations to better educate them about the role of developmental education in student success.

Developmental education department chairs should attempt to supply monthly updates of student successes as well as program stewardship. In addition, developmental educators must volunteer to serve on campus committees because, despite their already busy workloads, they need to be seen by administrators and faculty colleagues alike as vibrant thought leaders on their campuses. During such committee service, developmental educators can inform about and advocate for their students' unique needs such that they influence both policy and practice.

Creating Stronger Faculty Colleagues

To support the maintenance and enhancement of developmental education within postsecondary institutions, faculty members with little experience with underprepared students or issues related to readiness need to appreciate developmental education. Student motivation and non-cognitive college readiness must be explored as an at-risk factor that needs to be addressed collaboratively by student and academic affairs. Secondly, curriculum alignment between introductory courses and developmental education must provide seamless movement of acquired skills. The partnerships forged across the college with faculty and staff members, both full-time and adjunct (who often teach entry-level courses), outside developmental education can prove valuable for benefitting students and enhancing

developmental education. They also lead to improved conversations regarding student success (Arendale & Ghery, 2005; Bailey, 2009).

Those on faculty and professional associations and governing boards need to be informed by developmental education colleagues. These association units, individually or collectively, can lobby and negotiate for support of developmental education within their own institutions if they possess a clear understanding of the functions, needs, and effectiveness of developmental education.

Enhancing Developmental Educator and Academic Advisor Partnership

For maximum effectiveness in both education and advocacy, developmental education professionals must partner with those in academic advising roles, orientation and/or in first-year experience programs who introduce new students to curricula (Boylan, 2009, p. 17). Students frequently seek their advisors' input so developmental educators must work collaboratively with advisors to explain the benefits of a developmental foundation in the beginning years of higher education. Developmental educators can share course content so that advisors can explain to students the learning opportunities available. In addition, students in need of developmental education often lack an understanding of the language of the academy and therefore possess little familiarity with problem solving and decision making within a higher education context, and academic advisors support developmental students in navigating the new student process. Osterholt and Barratt (2012) indicated that these skills comprise "an integral piece of achievement and can be a highly challenging

aspect for developmental students during their transitional period" (p. 23). Advisors help students create workable educational plans for personal and academic success. They assess students' motivation and non-cognitive college readiness and address these outcomes. They also connect students with campus resources ranging from career opportunities to financial aid. These responsibilities make advising a natural extension of developmental education as both help ease students' transitions into higher education.

Faculty members of all rank from across the disciplines and advisors influence student success within and beyond the developmental education curriculum; their public connections within organizations promote best practices for college students and their success. Developmental educators must move in new directions to create even stronger interfaces with faculty and advising colleagues and to gather their support for maintaining and enhancing developmental education within higher education institutions

Developmental Education: A Foundation for Inclusion

Many developmental education faculty members and professionals have learned through their own experiences the challenges faced by diverse students. They know the predictors of student success and persistence to achieving a degree. They also know pre-college factors that challenge that success. Developmental educators know these factors go beyond those associated with at-risk students such as socioeconomic status, race, or first-generation status. They know unrecognized risk factors such as learning disabilities, emotional concerns, poor study skills and habits, fear of mathematics, academic motivation and

inconsistent or poor educational background all impact college success. All these factors beg for the definition of at risk to be expanded, and students with these challenges or in difficult situations need developmental education to successfully achieve academic success.

Because the risk factors change, developmental educators must embrace adjustments to developmental curricula and programs that target new needs. For example, innovative interventions, such as an intensive reading and writing developmental course which may not count toward graduation or other institutional requirements, may address a variety of student difficulties. In addition, developmental educators must publicly share student successes and emerging needs. Policy makers and higher education leaders use this information to understand necessary improvements that help move students from remediation to inclusion and through graduation.

To maintain and enhance developmental education within postsecondary institutions,

Conclusion

The scope, purpose and outcomes of developmental education in community colleges continue to evolve. With the pressure from external agencies to increase graduation rates and decrease costs, community colleges, educators and students must prove the value and worth of developmental education through data driven outcomes assessment. The process of determining need for developmental coursework must be multifaceted. The delivery of the coursework needs to embrace the use of technology in the classroom, develop innovative ways to steam line course sequencing, and insure ways for students to quickly move through developmental courses. Concurrently, the use of graduation rates as a measure of

developmental education faculty must advance their own skills and apply ever higher standards. They must create new or stronger developmental education links to existing and recently acquired allies to harness the information, insights, and support that these individuals offer. To transform adverse perspectives and bolster support, they must turn potentially fleeting ideas for maintaining and enhancing developmental education into long-lasting principles for practice and develop relationships with partners outside and within campuses. Developmental educators must teach students course content, but also inform stakeholders about the benefits of developmental education for underprepared students. By consistently and persistently arguing for the continued existence and improvement of development education within postsecondary institutions, developmental educators advocate for the inclusion and the success of all matriculating underprepared students.

success in community colleges needs to be re-examined. The pressure to meet budget requirements through performance based funding must be eliminated. All stakeholders must reaffirm their commitment to support the missions of community college at the point of entry for all individuals seeking to improve their lives through education and thus commit to the resources to support all students.

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