# 8. US community colleges and lessons for British further education colleges

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Despite the many differences between community colleges in the United States and British further education colleges, there are substantial similarities in their social role and educational mission (Dougherty 2009). The US community college could thus provide an illuminating comparison for the British FE college, as consideration is given to ways of fully harnessing the FE college's potential role in higher education and navigating the contradictions of providing comprehensive access to HE within a socially stratified society.

In recent years, US community colleges have come to be recognised as one of the most important institutions in American HE because of their great number, critical role in providing the opportunity of attending college to less advantaged students, and their major contribution to post-secondary vocational training. Numbering 1,032 establishments in 2007, public two-year colleges comprise a quarter of all HE institutions in the US and enrol around 35 per cent of all degree-credit<sup>1</sup> college students. For students who are mature, part-time, or from minority or low socioeconomic groups, this share is even greater (US National Center for Education Statistics 2008). Finally, community colleges account for over half of students in all forms of post-secondary vocational training and provide a large share of US graduates in such important occupations as nursing, computer operations, and motor vehicle repair (Dougherty and Bakia 2000, Grubb 1996, Jacobs and Dougherty 2006).

This chapter examines the governance and finance of US community colleges and the strengths and weaknesses of the main features of their mission and curriculum (HE access, baccalaureate preparation, vocational education, remedial and developmental education, and adult, continuing, and community education).

# Governance and finance of US community colleges

Community colleges in the US are primarily controlled by state and local government. The federal government has relatively little direct power over HE, particularly community colleges. It provides only 14 per cent of the revenues of community

<sup>1.</sup> Degree-credit enrolments understate the community college's role. A very large number of community college students – particularly those receiving vocational training – are in non-credit programmes that do not lead to certificates or degrees (Dougherty and Bakia 1999, Van Noy *et al* 2008). If taking into account non-credit enrolments, the community share of total enrolments would undoubtedly be even bigger.

colleges (though this percentage would be higher if we included federal student aid), and it does not govern them (Clark 1990, Gladieux *et al* 2005, National Center for Education Statistics 2008). Instead, it is state governments that decide if community colleges can be established and how they must operate, and in most states it is local boards that directly operate the colleges. Moreover, state and local governments together provide 55 per cent of community college revenues (Lovell and Trouth 2002, US National Center for Education Statistics 2008).

The large state and local role in community college governance and finance has produced a community college system that varies considerably by state and even locality. This allows for considerable educational experimentation, as individual community colleges or entire state community college systems try out new approaches and provide ideas for new directions they might take.

The downside of this state and local variation is that it also allows for considerable inequalities across the country in the resources made available to students. Because of the weak federal role in financing community colleges, their expenditure per student can vary greatly across the United States. In the fiscal year 2005–6, Louisiana community colleges spent \$14,908 (about £9,700) per full-time equivalent (FTE) student, while Florida community colleges spent \$9,442 (about £6,100) (US National Center for Education Statistics 2008).

# Missions and curricular organisation

Most community colleges are 'comprehensive' institutions, offering a wide variety of programmes to a diverse clientele in service of the public goals of democratising access to HE and meeting the educational and training needs of the 'community' (whether students, business, or civic groups). In what follows we will examine the community college's democratising role and then the four basic curricular missions: baccalaureate preparation, vocational education, remedial and developmental education, and adult, continuing, and community education. As we go along, we will note what difficulties community colleges encounter.

# Widening access to higher education

As with the British FE college, the US community college is a central avenue into HE. Several studies find that American states and localities that are highly endowed with community colleges have significantly higher college and university attendance rates than states and localities with a smaller community college presence (Dougherty 1994, Rouse 1998).

Several features of community colleges make them great avenues of college access. They are widely distributed across the country, in urban, suburban, and rural areas. They are cheaper to attend than four-year colleges. And because of their open-door admissions ideal, they are more willing to take 'non-traditional' students (Dougherty 1994). As a result, community colleges attract higher than average numbers of working class, non-white, and female students. For example, 41 per cent of all

minority (Black, Latino, Asian, and Native American) degree-credit students in US higher education are enrolled in community colleges, well above the population average of 35 per cent of all students (US National Center for Education Statistics 2008).

However, despite the community college's success in widening access to HE, many students entering a college system leave it neither with a degree in hand nor having transferred to another institution. Among students who entered a community college in autumn 1995 and were followed up six years later, 47 per cent had left HE without a degree of any kind (Berkner *et al* 2002).

Certainly, the fact that community college students tend to come from less advantaged backgrounds and be less prepared academically plays a role in the frequency of non-graduation. However, institutional factors also play a significant role. Community colleges are less able to academically and socially integrate their students into the life of the college through such devices as providing on-campus housing and surrounding them with academically oriented peers and teachers (Dougherty 1994, 2002). Moreover, community colleges rely very heavily on part-time faculty. In autumn 2007, 69 per cent of all faculty in public two-year colleges were part-timers (National Center for Education Statistics 2008). There is evidence that higher proportions of part-time faculty in community colleges result in lower rates of student retention, even in studies that control for various student and institutional characteristics (Calcagno *et al* 2008, Jaeger and Eagan 2009). Finally, community colleges often do not adequately meet the needs of their students for extensive programme and career advice (Rosenbaum *et al* 2006).

In order to address high drop-out rates, many community colleges have moved to increase their academic and social integration of students. One device is the provision of a freshman (first year) seminar that aims to improve the study skills of students, help them choose the right courses, and provide closer contact with faculty and with other students. There is considerable evidence that this has beneficial results (Pascarella and Terenzini 2005, Zeidenberg *et al* 2007). Another device attracting attention has been the formation of learning communities, in which related courses are coupled together or team-taught mega-courses are offered that meet several days a week for a few hours at a time. There is evidence that such learning communities have some positive impacts on student retention and achievement (Scrivener *et al* 2008).

Besides trying to better integrate students, many community colleges are working with their neighbouring secondary school systems to improve the competence and motivation of students before they even reach the community college. One device has been to communicate the academic expectations of the community college and information on how well a given high school's graduates are meeting those expectations once they arrive at the college. If students still need improvement in their academic skills when they enter HE, many community colleges refer them to remedial or developmental education (Dougherty 2002).

## Preparation for the baccalaureate

A central role of the community college has always been to provide access to the four-year baccalaureate degree, reflecting the fact that a large proportion of community college entrants state a desire to eventually get this degree. In a national survey of students entering HE in autumn 1995, three-quarters of community college entrants indicated that they aspired to eventually get at least a baccalaureate degree (Kojaku and Nunez 1998). Typically, the baccalaureate preparation role takes the form of community colleges offering the first one or two years of baccalaureate preparation, with students then transferring to a four-year college or university to complete the remaining years of baccalaureate education (Cohen and Brawer 2008). In several states, this baccalaureate preparation mission has grown to the point that the majority of baccalaureate recipients in those states started in the community college.

Despite the community college's crucial role in baccalaureate preparation, it has long been fraught with controversy. A now sizeable number of studies find that starting at a community college rather than a four-year college or university significantly lowers the probability that a baccalaureate aspirant will attain that degree. Clearly, part of this gap in baccalaureate attainment is simply due to the fact that community college students on average tend to be less privileged economically, less prepared academically, and less ambitious educationally and occupationally than four-year college entrants.

Still, even when we compare community college entrants and four-year college entrants with the same family background, academic aptitude, high school grades, and educational and occupational aspirations, community college entrants on average attain about 15 per cent fewer baccalaureate degrees than their four-year college peers. This baccalaureate gap even holds in studies that have systematically addressed issues of selection bias through the use of instrumental variables analysis or propensity score analysis (Alfonso 2006, Dougherty 1994, Doyle 2008, Long and Kurlaender 2009). This realisation has prompted scholars to look at the institutional sources of this 'diversion effect'.

Baccalaureate aspirants entering community colleges are more likely to drop out of HE because of the difficulties, noted above, that community colleges have in academically and socially integrating students. In addition, baccalaureate aspirants entering community colleges receive weaker encouragement to pursue a bachelor's degree, less adequate financial aid, and less interest by four-year colleges in admitting them to popular campuses and programmes (Dougherty 1994, 2002). This lack of

<sup>2.</sup> These figures overstate the baccalaureate ambitions of community college students. Many of those holding baccalaureate ambitions are in no hurry to realise them. Moreover, for a good many, this ambition is not founded on a very solid basis. However, it is still important to realise that many students who enter community college, even if with the intention of securing vocational training, do hope to eventually get a baccalaureate degree.

3. Data from the 1980s indicated that baccalaureate attainment of community college transfer students was undercut as well by higher rates of attrition in the junior and senior year than was the case for students who had started at four-year colleges as freshmen. However, studies based on data from the 1990s found that this apparently is no longer the case (Melquizo and Dowd 2009).

transfer to universities is more pronounced among students who are lower in socioeconomic status, non-white, and older than the average (Cabrera *et al* 2005, Dougherty and Kienzl 2006).

Many community colleges have moved to strengthen and even awaken transfer interest by approaching students who might or should be interested in transfer with extensive and up-to-date information about transfer opportunities. For example, the California community colleges established transfer centres that provide information on transfer, special transfer counsellors, and a place to meet admissions officials from the universities. In order to overcome students' fears of having to move from the community college to an entirely new college, many community colleges have encouraged transfer aspirants to experience four-year college life in advance by taking courses at those colleges, participating in university cultural events, and simply visiting university campuses (Dougherty 2002).

In order to reduce friction in the transfer process, community colleges and, more recently, state agencies have developed a variety of transfer and articulation structures to ease transfer between community colleges and four-year colleges and universities and to ensure that students get as much credit as possible for their community college courses. The best developed articulation and transfer structures have been ones mandated by state law. A large number of states require that HE institutions define a core set of courses that if taken by community college students are guaranteed credit at a four-year college or university. Moreover, several states have mandated that students completing a two-year associate's degree at a community college and admitted to a public university be guaranteed status as third-year students. Finally, a number of states have developed common course numbering systems so that courses that are judged as having the same content and rigour at community colleges and four-year colleges are given the same course number and guaranteed transfer across system boundaries (Dougherty 2002, Dougherty and Reid 2007, Ignash and Townsend 2001).<sup>4</sup>

In recent years, community colleges in 14 states have moved beyond facilitating transfer to baccalaureate-granting institutions and have begun to offer their own baccalaureate degrees (Dougherty 2002, Floyd *et al* 2005). The most extensive development has occurred in Florida, where over a third of community colleges offer baccalaureate degrees, primarily in education, business management, nursing, and health care administration (Community College Baccalaureate Association 2009). In order to be able to grant a baccalaureate degree, community colleges typically must secure state approval, either through state legislation or the decision of a state HE governance board (Floyd *et al* 2005). While this is a promising solution to the gap in baccalaureate attainment for community college entrants, we do not yet have conclusive data on its effectiveness.

<sup>4.</sup> While these transfer and articulation arrangements are quite interesting, it should be noted that there is an absence of compelling evidence that they actually increase transfer rates significantly. States with stronger articulation and transfer regimes do not appear to have significantly higher rates of transfer (Roksa 2009).

## **Workforce preparation**

US community colleges play a crucial role in workforce preparation and economic development. They prepare many students for their first job, retrain unemployed workers and welfare recipients, and upgrade the skills of employed workers (Dougherty and Bakia 1999, Cohen and Brawer 2008, Grubb 1996, Jacobs and Dougherty 2006). In terms of initial job preparation, community colleges are key suppliers of trained workers for 'middle level' or 'semi-professional' occupations such as nursing, computer operations, and car mechanics. In fact, about one-fifth of recent labour force entrants begin at a community college (Grubb 1996).

Vocational graduates of US community colleges receive substantial economic payoffs. For example, students earning a vocational associate's degree from a community college earn 15 to 30 per cent more in annual income than high school graduates who are similar in terms of race and ethnicity, parental education, marital status, and job experience. These are averages, and there are vocational programmes – particularly in nursing and other fields – where the wage premium beyond the high school diploma is even greater (Grubb 2002, Marcotte *et al* 2005). As a result, for many less privileged students, vocational education has emerged as a viable path to success. If they enter one of the more selective and remunerative vocational training programmes in community colleges, such as nursing, they can end up with higher salaries than they would have if they had graduated from the less remunerative baccalaureate degree programmes (Deil-Amen and Deluca, in press).

Notwithstanding the above, the economic payoffs to community college degrees are, on average, still not as good as those for baccalaureate degrees. Looking across all fields of study, the average baccalaureate degree pays about 40–50 per cent more than the average high school degree, considerably more than the average vocational or academic associate's degree (Grubb 2002, Marcotte *et al* 2005). Moreover, there is evidence that community college students who pursue a vocational degree are significantly less likely to eventually transfer to pursue a baccalaureate degree, even when one controls for family background, educational aspirations, and high school preparation (Dougherty and Kienzl 2006).<sup>5</sup>

However, several US states are addressing the issues of transferability of vocational courses and programmes from community colleges to universities (Ignash and Kotun 2005). For example, Florida and Texas have developed arrangements to ease the transfer of vocational credits so that community college vocational students in certain fields can go on to university more easily (Dougherty *et al* 2006).

# Remedial or developmental education

From the beginning, community colleges have provided access to HE for students who are not regarded as academically prepared for college-level work (Cohen and Brawer

<sup>5.</sup> Though majoring in a vocational education programme apparently impedes transfer on average, this may not be not true for all vocational programmes, particularly more selective ones (Regina Deil-Amen, personal communication).

2008). This remedial or developmental role grew sharply during the 1990s as state legislators and state universities pushed to have remedial education reduced or even eliminated at four-year colleges and relegated instead to community colleges (Shaw 1997). In 2000, 42 per cent of freshmen in public two-year colleges were officially enrolled in remedial courses either in reading, writing, or arithmetic, as compared to 28 per cent of college students generally (US National Center for Education Statistics 2003).<sup>6</sup>

While community colleges may do a better job than four-year colleges of remediating students, there is no strong evidence that community colleges do a very good job on the whole. A number of studies have found small positive impacts of community college developmental education but the areas of impact (whether grades on subsequent non-remedial courses, completing a degree, or transferring to a four-year college) are not consistent across studies. In addition, there is no consensus on what forms of developmental education are most effective (Bailey 2009, Dougherty 2002, Perin 2006).

At the very least, effective remediation requires both that community colleges reduce the need for it and then find ways of addressing the need that remains. As discussed above, many community colleges have moved to reduce the need by working with neighbouring high schools to improve the skills of high school graduates. Moreover, US states have been making major efforts to set clear standards for college preparedness (Achieve 2006, Kirst and Venezia 2006).

However, some students still arrive at community college needing further improvement in their college readiness, so many community colleges have moved to ensure that those students in need get remediation. One way is through mandatory assessment at entrance to the community college and mandatory placement in developmental courses if needed. However, such practices are far from universal and there is still considerable uncertainty about what tests and what cut-off scores on them really indicate who needs remediation and what form it should take (Bailey 2009, Perin 2006, Phipps 1998).

Moreover, it is not clear from American research what works best in community college developmental education. US community colleges are experimenting with many different forms and there is some indication that what appears to work best is to avoid a strict separation between remedial and college-level instruction. Students needing developmental education may benefit most from being placed as much as possible in regular college courses and provided with supplementary instruction. Alternatively, they can be put in developmental courses but also enrolled in paired college-level courses, creating a learning community that will infuse the

<sup>6.</sup> These figures underestimate significantly the number of community college students who actually need remediation. Two national studies find that about 30 per cent of students referred by community colleges to remediation do not enrol in any remedial classes and therefore are not counted in statistics of remedial enrolments (Bailey 2009).

developmental courses with more interesting content and give students a sense that they are progressing in their non-remedial studies (Bailey 2009, Grubb 2001, Perin and Charron 2006).

A difficult organisational issue that community colleges face is whether developmental education should be centralised in one organisational unit or distributed throughout the college. Centralisation better allows for creating a cohesive, well trained staff of developmental educators. However, a distributed structure is more conducive to contextualising developmental education for different disciplines and therefore engaging student interest (Perin and Charron 2006).

### Adult, continuing, and community education

One of the least well understood curricular missions of the community college is adult, continuing, and community education (ACCE). This is a catch-all name including several different kinds of programmes: vocational improvement and retraining for those already working, high school completion and adult literacy improvement, personal development and recreational courses, and community services such as arts events. ACCE is financed through a combination of student tuition, state enrolment-based aid (in some states), categorical grants from the federal and state governments for specific programmes such as adult basic education, and contracts from employers for employee training (Cohen and Brawer 2008, Downey *et al* 2006).

The ACCE divisions of community colleges are often their most dynamic because they are less encumbered by restrictions. Community colleges can more easily develop new course offerings in this area because the courses usually do not carry credit and therefore are less subject to regulation by state education agencies. Community colleges can use non-credit offerings to learn more about the demands of the labour market, particularly in fast changing technology fields. If new needs and ready demand are found, this may lead to similar courses being developed that are credit bearing and articulated into complete certificate or degree programmes (Dougherty and Bakia 2000, Downey *et al* 2006, Van Noy *et al* 2008).

The ACCE divisions of community colleges face a number of difficulties. First, they are not usually well funded. State enrolment-based funding is often absent or pays less per student than state funding for regular, credit-bearing academic and occupational programmes (Cohen and Brawer 2008, Grubb *et al* 2003, Van Noy *et al* 2008). In part because of the lesser state funding, complaints are frequently lodged that ACCE courses, particularly in adult education, are of poor quality because of overly high reliance on part-time faculty and inadequate provision of student support services (Grubb *et al* 2003).

As with remedial education, ACCE faces the perennial question of whether it should be integrated with regular academic instruction or be kept separate from it, in a centralised ACCE division. Integration causes friction with the credit-bearing academic side of community colleges and carries the danger that ACCE will become overly

academicised. On the other hand, separation of ACCE from the regular academic education wing of a community college means that the academic side of the community college less often benefits from information about labour market demands that the non-credit side discovers in the process of fielding new courses and programmes and students who begin in non-credit courses are less able to move towards credit-bearing programmes (Grubb *et al* 1997, Dougherty and Bakia 2000).

### **Conclusions**

There are clearly many differences between US community colleges and British FE colleges in governance, finance, and curriculum. At the same time, there are substantial similarities. Both types of institution are major portals of entry to HE and key purveyors of post-secondary vocational education (Dougherty 2009). These similarities allow the community college to be a source of both ideas and warnings for the FE college.

The US community college has compiled an enviable record. Its decentralised system of governance and finance has allowed for great experimentation with organisational forms and practice. The community college has greatly widened access to HE for many, particularly low-income, minority, and older students. It has facilitated the movement to the baccalaureate degree of a host of students, becoming the main portal of entry to the baccalaureate in several states. The community college has met the quite varied and complicated labour training needs of many different kinds of students and employers. It has provided remedial and developmental education to a vast number of students who arrive in college not prepared for college-level work. And it has developed many innovative programmes for adult, continuing, and community education.

At the same time, these achievements are balanced by considerable problems. The decentralisation of community college finance produces great inequalities in spending across the country. Nearly half of all community college entrants leave without achieving a degree or having transferred to another college. Baccalaureate aspirants who enter the community college are significantly less likely to achieve that degree than if they had entered a four-year college or university directly. The returns for a vocational degree are significantly lower on average than those for a baccalaureate degree. Community colleges still have to work out the most effective way to provide remedial and developmental education. And the community college's offerings in adult, continuing, and community education have not yet yielded conclusive evidence of significant, across-the-board benefits for students, employers or society.

But the American community college continues to address all these problems vigorously. In the process it has developed new structures and processes that, even if they have not resolved the problems the college faces, have mitigated them and therefore deserve close inspection.

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### References

- Achieve, Inc. (2006) Closing the Expectation Gap. Washington, DC: Achieve, Inc.
- Alfonso M (2006) 'The Impact of Community College Attendance on Baccalaureate Attainment', Research in Higher Education vol 47 (Dec.): 873-903
- Bailey T (2009) 'Challenge and Opportunity: Rethinking the Role and Function of Developmental Education in Community College', New Directions for Community Colleges 148 (Spring): 11-30
- Berkner L, He S, and Cataldi EF (2002) Descriptive Summary of 1995-96 Beginning Postsecondary Students: Six Years Later. NCES 2003-151, Washington, DC: National Center for **Education Statistics**
- Cabrera AF, Burkum KR, and LaNasa SM (2005) 'Pathways to a Four-Year Degree', in Seidman A (ed.) College Student Retention: Formula for Student Success. Westport, CT: Praeger Publishers, pp. 155-214
- Calcagno JC, Bailey T, Jenkins D, Kienzl G, and Leinbach T (2008) 'Community College Student Success: What Institutional Characteristics Make a Difference?', Economics of Education Review 27 (6): 632-645
- Clark BR (1990) 'Higher Education American-Style: A Structural Model for the World', Educational Record Journal, 71 (4): 24-27
- Cohen AC and Brawer FB (2008) The American Community College, 5th ed. San Francisco: Jossey-Bass
- Community College Baccalaureate Association (2009) Baccalaureate Conferring Locations Fort Myers, Florida: CCBA: www.accbd.org/colleges\_areas.php?ct=US
- Deil-Amen R and Deluca S (In press) 'The Underserved Third: How Our Educational Structures Populate an Educational Underclass', Journal of Education for Students Placed at Risk
- Dougherty KJ (1994) The Contradictory College: The Conflicting Origins, Impacts, and Futures of the Community College Albany, NY: State University of New York Press
- Dougherty KJ (2002) 'The Evolving Role of the Community College: Policy Issues and Research Questions', in J Smart and W Tierney (eds.) Higher Education: Handbook of Theory and Research. Vol. 17. Dordrecht, Netherlands: Kluwer, pp. 295-348
- Dougherty KJ (2009) 'English Further Education through American Eyes', Higher Education Quarterly 63 (4) (Oct.): 343-356
- Dougherty KJ and Bakia MF (1999) The New Economic Development Role of the Community College: Final Report to the Sloan Foundation. Community College Research Center, Teachers College, Columbia University: http://ccrc.tc.columbia.edu/Publication.asp?UID=20
- Dougherty KJ and Bakia MF (2000) 'Community Colleges and Contract Training: Content, Origins, and Impacts', Teachers College Record 102 (1): 197-243
- Dougherty KJ and Hong E (2006) 'Performance Accountability as Imperfect Panacea: The Community College Experience', in Bailey T and Morest VS (eds.) Defending the Community College Equity Agenda. Baltimore: Johns Hopkins University Press, pp. 51-86
- Dougherty KJ and Kienzl G (2006) 'It's Not Enough to Get Through the Open Door: Inequalities by Social Background in Transfer from Community Colleges to Four-Year Colleges', Teachers College Record 108: 452-487

- Dougherty KJ, Reid M and Nienhusser HK (2006) State Policies to Achieve the Dream in Five States: An Audit of State Policies to Aid Student Access to and Success in Community Colleges in Florida, New Mexico, North Carolina, Texas, and Virginia New York: Community College Research Center, Teachers College, Columbia University: http://ccrc.tc.columbia.edu/Publication.asp?UID=392
- Dougherty KJ and Reid M (2007) Fifty States of Achieving the Dream: State Policies to Enhance Access to and Success in Community Colleges across the United States New York: Community College Research Center, Teachers College, Columbia University: http://ccrc.tc.columbia.edu/ContentByType.asp?t=1
- Downey J, Pusser B and Turner K (2006) 'Competing Missions: Balancing Entrepreneurialism with Community Responsiveness in Community College Continuing Education Divisions', New Directions for Community Colleges 136 (Winter): 75–82
- Doyle WR (2008) 'The Effect of Community College Enrollment on Bachelor's Degree Completion', *Economics of Education Review* 28: 199-206
- Floyd DF, Skolnik M and Walker K (Eds.) (2005) *The Community College Baccalaureate Sterling*, VA: Stylus Press
- Gladieux LE, King JE and Corrigan TE (2005) 'The Federal Government and Higher Education', in Altbach PG, Berdahl RO and Gumport PJ (Eds.) *American Higher Education in the Twenty First Century*. Baltimore, Maryland: Johns Hopkins University Press, pp. 163-197
- Grubb WN (1996) Working in the Middle San Francisco: Jossey-Bass
- Grubb WN (2001) From Black Box to Pandora's Box: Evaluating Remedial/developmental Education New York: Community College Research Center, Teachers College, Columbia University: http://ccrc.tc.columbia.edu/Publication.asp?uid=24
- Grubb WN (2002) 'Learning and Earning in the Middle, Part I: National Studies of Pre-Baccalaureate Education', Economics of Education Review 21(4): 299 321
- Grubb WN, Badway N, Bell D, Bragg D, and Russman M (1997) *Workforce, Economic, and Community Development: The Changing Landscape of the Entrepreneurial Community College.* Berkeley, CA: National Center for Research in Vocational Education. (ERIC ED 413033)
- Grubb WN, Badway N and Bell D (2003) 'Community Colleges and the Equity Agenda', Annals of the American Academy of Social and Political Sciences 586 (March): 218-240
- Ignash JM and Kotun D (2005) 'Results of a National Study of Transfer in Occupational/Technical Degrees: Policies and Practices', Journal of Applied Research in the Community College 109 (Spring): 109-120
- Ignash JM and Townsend BK (2001) 'Statewide Transfer and Articulation Policies: Current Practices' in Townsend BK and Twombly SB (Eds.) *Community Colleges: Policy in the Future Context* Stamford, CT: Ablex
- Jacobs J and Dougherty KJ (2006) 'The Uncertain Future of the Workforce Development Mission of Community Colleges', in Townsend BT and Dougherty KJ (Eds.) Community college missions in the 21st century. New Directions for Community Colleges 136 (November): 53-62
- Jaeger AJ and Eagan MK (2009) 'Unintended Consequences: Examining the Effect of Part-Time Faculty Members on Associate's Degree Completion', Community College Review 36

- (3): 167-194
- Kirst M and Venezia A (Eds.) (2006) From High School to College: Improving Opportunities for Success in Post-secondary Education San Francisco: Jossey-Bass
- Kojaku L and Nunez A (1998) *Descriptive Summary of 1995-96 Beginning Post-secondary Students, NCES 1999-030*, Washington, DC: U.S. National Center for Education Statistics
- Long BT and Kurlaender M (2009) 'Do Community Colleges Provide a Viable Pathway to a Baccalaureate Degree?', Educational Evaluation and Policy Analysis 31 (1): 30-53
- Lovell CD and Trouth C (2002) 'State Governance Patterns for Community Colleges', New Directions for Community Colleges 117 (Spring): 91-100
- Marcotte DE, Bailey T, Borkoski C and Kienzl GS (2005) 'The Returns of a Community College Education: Evidence from the National Education Longitudinal Survey', Educational Evaluation and Policy Analysis 27 (2): 157-175
- Melguizo T and Dowd AC (2009) 'Baccalaureate Success of Transfers and Rising 4-Year College Juniors', *Teachers College Record* 111 (1): 55-89
- Morest VS (2004) The Role of Community Colleges in State Adult Education Systems: A National Analysis New York: Council for Advancement of Adult Literacy
- Pascarella ET and Terenzini PT (2005) *How College Affects Students*. 2nd Ed. San Francisco: Jossey-Bass
- Perin D (2006) 'Can Community Colleges Protect Both Access and Standards? The Problem of Remediation?' *Teachers College Record* 108 (3): 339-373
- Perin D and Charron K (2006) 'Lights Just Click on Every Day', in Bailey T and Morest VS (Eds.) *Defending the Community College Equity Agenda* Baltimore: Johns Hopkins University Press, pp. 155-194
- Phipps RA (1998) *College Remediation: What It Is, What It Costs, What's at Stake?* Washington, DC: The Institute for Higher Education Policy
- Roksa J (2009) 'Building Bridges for Student Success: Are Higher Education Articulation Policies Effective?' Teachers College Record 111 (10): 2444-2478
- Rosenbaum JE, Deil-Amen R and Person AE (2006) *After Admission: From College Access to College Success.* New York: Russell Sage Foundation
- Rouse CE (1998) 'Do Two-Year Colleges Increase Overall Educational Attainment? Evidence from the States', *Journal of Policy Analysis and Management* 17 (4): 595–620
- Scrivener S, Bloom D, LeBlanc A, Paxson C, Rouse CE, and Sommo C (2008) A Good Start: Two-Year Effects of a Freshmen Learning Community Program at Kingsborough Community College. New York: MDRC Inc.: www.mdrc.org/publications/473/full.pdf
- Shaw KM (1997) 'Remedial Education as Ideological Battleground: Emerging Remedial Education Policies in the Community College', Educational Evaluation and Policy Analysis 19 (Fall): 284–296
- United States National Center for Education Statistics (2003) *Remedial Education at Degree Granting Post-secondary Institutions in Fall 2000, NCES 2004-010,* Washington, DC: Government Printing Office
- United States National Center for Education Statistics (2008) *Digest of Education Statistics,* 2008 Washington, DC: Government Printing Office

- Van Noy M, Jacobs J, Korey S, Bailey T and Hughes KL (2008) *The Landscape of Noncredit Workforce Education: State Policies and Community College Practice, Issue Brief 38*, New York: Community College Research Center, Teachers College, Columbia University: http://ccrc.tc.columbia.edu/Publication.asp?uid=634
- Zeidenberg M, Jenkins D and Calcagno J C (2007) 'Do Student Success Courses Actually Help Community College Students Succeed?', CCRC Brief 36, New York: Community College Research Center, Teachers College, Columbia University: http://ccrc.tc.columbia.edu/Publication.asp?uid=667