

How the public interest in teaching quality and standards is secured in US higher education

A report to HEFCE by Tony Clark and Nigel Brown

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Introduction

1. This is the final report of a short desk-based study commissioned by HEFCE. The purpose was to examine within the context of a free market in the US how the public interest in the quality of teaching and the standards of awards is secured – whether through funding regimes and quality assurance systems, through regulations or interventions, or through the effects of market forces.
2. HEFCE indicated an interest in the following broad questions:
 - a) What is the nature of public concern for teaching quality and standards in the US?
 - b) What are the roles and responsibilities of the various public bodies involved in securing quality and standards?
 - c) How do the funding and quality assurance systems (and any other relevant interventions) operate, in seeking to secure quality and standards?
 - d) Is there any evidence of the effectiveness or otherwise of such systems?
 - e) What have been the main drivers and currents of debate surrounding the development of these systems?
 - f) What lessons might we draw from the US experience, to inform debates about how to secure quality and standards within the increasingly market-driven English higher education system?
3. The report starts with an explanation of the context in the US and then addresses the broad questions of interest to HEFCE. Much of the material is based on published papers and material from web-sites. We are particularly grateful to those in and from the US who provided advice at short notice. These are listed in Annex A, with references for papers.

Context

4. US higher education comprises both state-funded and private (mainly not-for-profit) institutions – about 3,000 in total. Around half of these are state funded. In addition there are a further 3,000 for-profit institutions, many of which offer lower-level vocational programmes and do not award degrees. This report concentrates on the first category which operates at a level closest to what is defined as higher education in the UK.
5. Within the first category there are three main kinds of institution: those offering two year courses often leading to an associate degree, those offering four year courses leading to a bachelors degree, and a selective group of institutions offering qualifications up to masters or research degrees. All these institutions have a range of titles. Many of the first group are called community colleges and most are state

funded. The second group may be colleges or universities. Many are relatively small private liberal arts colleges. The third group will often be called universities but may also be called institutes (e.g. MIT, Massachusetts Institute of Technology). In this report, as in the US, institutions as a generic term are referred to as **colleges**.

6. For in-state students at state colleges, annual tuition fee levels are usually set by the state concerned, and range from \$2,000 on average for two year colleges to \$5,000 for four year institutions. They have increased substantially in recent years (by up to 22% in the last two years), reflecting the financial position of many state governments. Fees for out-of-state students and those at private institutions have also increased significantly. They are much higher at between \$15,000 and \$30,000 per year (College Board Annual Trends in College Pricing study)(1). However, after taking into account financial aid (see below), the average tuition fee actually paid by students at public universities is just 27% of the official fee at public universities and 57% of the official fee at private universities.

7. Because of increasing financial aid, actual fees paid have fallen by some 30% over the five years to 2002/03 at public universities, and have increased by just 7% at private universities (US Today analysis – 28/06/04)(2). Furthermore, middle class parents have received significant tax benefits through eight tax breaks for college education since 1997. The annual cost of room and board for students fell slightly in 2003/04 to some \$5,000. So the average total annual cost of tuition and room/board at public four year colleges was some \$10,600, and at private colleges was nearly \$27,000 (College Board). Students spend on average a further \$6,000 a year on other daily expenses. Despite the availability of student loans in addition to other financial aid, many students supplement their income through part-time campus jobs or jobs in the summer vacation. Choice of college may be influenced by the availability of part-time jobs on and off the campus.

8. The undergraduate curriculum is more general than in the UK, especially for the first two years where key skills, such as communication and IT skills, are specifically included. There is usually good progression – required by the relevant state for state-funded institutions – from associate degree to a four year degree. About one-third of the intake to four year colleges is admitted from community colleges to the third year of a four year degree. While the lack of early specialisation may lead in some subjects to lower attainment in the chosen specialised courses after four years, progress at the selective postgraduate level is nevertheless impressive. The elite research universities are outstanding.

9. The US spends over 2.5% of GDP on tertiary education – higher than the OECD mean of 1.7% and much higher than the UK (around 1%). In comparison with other countries, higher education in the US is well resourced, in part because of the level of private contributions.

10. The individual states have responsibility for the funding of teaching and learning at public institutions, including associated public accountability and the regulation of tuition fees. There is public concern both about the quality of teaching and learning and about the standard attained through qualifications. However, this concern is disparate and not well-defined. In response to such concerns, about half of state governments have introduced performance-based funding designed to promote improved quality and standards.

11. The federal government has a prime responsibility for student support (financial aid). This is on the basis that anyone in the US who has graduated from high school should have the opportunity to 'go to college' if they wish to do so. In

2004/05, the average federal grant to support tuition fees amounted to nearly \$2,500 and average student loan debt on graduation was nearly \$17,000 (FinAid 2005)(3). Individual states have provided some additional financial aid. Individual private institutions also provide additional substantial aid from endowments to ensure that the best students are not excluded. The financial aid arrangements are highly complex – too complex to be effective according to some commentators (Guardian – Nicholas Barr)(4). The emphasis on profit of some institutions has made the federal government conscious of its responsibility for ensuring that financial aid for students is well and properly spent. There has been particular public concern about the availability of degrees for purchase on the Internet, and about the effectiveness of some private colleges offering degrees through e-learning. These concerns have impacted on quality assurance arrangements in all tertiary institutions, described in more detail below.

12. The federal government also provides public funds for research in colleges, allocated on a competitive basis for individual projects. The market here is, however, regulated. There is greater concentration of funds than in the UK. Research funding is restricted to a select group of some 350 colleges (just over 10% of colleges) offering research degrees. There is keen competition between members of this select group. This bears on the market for teaching and learning, and on the reputation and quality of teaching and learning at the research universities.

Quality assurance

13. The main assurance of quality involving an external check is provided through **accreditation**. This is usually described as self-regulation because colleges choose to become members of accreditation agencies for an annual fee. However this has become, in effect, a requirement for both private and state colleges because federal financial aid (grants and loans to students) is only available to students attending accredited institutions. State governments also require state colleges to be accredited as a condition of funding. Employers also look for graduates from accredited colleges.

14. Colleges have their own internal quality assurance arrangements based on collegial commitment to standards. Practice varies between accreditation agencies but the link between accreditation processes and internal quality arrangements is not strong. In some private colleges which are primarily market driven, reputation is often based largely on the calibre of students recruited and the quality of student facilities. Competition and peer pressure between the leading research universities does however place emphasis on academic programmes and the effectiveness of the teaching and learning regime.

15. In the light of the public concerns about quality and standards in higher education outlined above, a major new Higher Education Bill is currently before Congress. It provides for a range of additional features to be covered in accreditation – student learning outcomes, distance education, transfer of credit, and public information (Council for Higher Education Accreditation, CHEA, Analysis May 2004)(5). In addition it includes proposals for 'federal mandates on academic activities'. CHEA and other higher education associations are pressing for substantial revision to the Bill, mainly to stop what they see as erosion of academic autonomy. Some academic commentators argue that the role of accreditation requires a more radical review.

16. These concerns in state governments have led to state initiatives designed to improve the quality of teaching. About half the states have introduced performance-based funding.

17. Some believe that, in the private sector at least, competition within the higher education market provides a sufficient assurance over quality. If a college fails to provide quality teaching, it will ultimately fail. There is however the question as to whether consumers in the market have sufficient information to make a judgement about quality.

18. The remaining sections of this report consider in more detail the accreditation regime, assurance through the higher education market, and enhancing quality through performance-based funding. Each section includes a commentary based on published papers or on exchanges with individual experts. The report's conclusion draws on these commentaries. The final section offers lessons for the English system drawn up by the authors of this report.

Accreditation

19. The published purposes of accreditation in the US are:

- a) To assure academic quality to students and the public.
- b) To enable students to have access to federal financial aid.
- c) To ease but not guarantee the transfer of students between institutions.
- d) To engender employer confidence.

20. The process is overseen by the US Department of Education (USDE) and by a Council for Higher Education Accreditation (CHEA). USDE recognition is concerned mainly with assuring itself that certain minimum standards are maintained in colleges. Accreditation also seeks to assure and strengthen academic quality. There is institution-wide accreditation carried out mainly by one of the six regional not-for-profit accreditation agencies. In addition many specialised or vocational courses are accredited by national or specialised accreditation agencies.

21. The accreditation process starts with a self-evaluation of performance by the institution, covering the accrediting agency's standards. There is then a peer review by faculty staff, university administrators and members of the public – followed by a site visit. The review team is usually chaired by a senior academic – sometimes a president – from another college. The maximum recognition period is usually 10 years with a mandatory five year interim report. The agency's standards are expected by the USDE to cover:

- student achievement, course completion, and employment rates
- curricula
- the qualifications of faculty staff
- facilities, equipment, and supplies
- fiscal and administrative capacity
- student support services
- recruiting and admissions practices
- objectives of degrees offered
- records of student complaints

22. CHEA require accreditors to advance academic quality, demonstrate accountability, encourage purposeful change and needed improvement, employ fair procedures, and to reassess continually accreditation practices. There are also proposals for accreditation to cover the effectiveness of boards of trustees (governing bodies).

Commentary

23. Accreditation aims to set a minimum quality standard both in respect of the quality of teaching and learning, and in respect of the qualifications awarded. These encompass the objectives of academic audit through the Quality Assurance Agency (QAA) in the UK as well as the objectives of the external examiners system.

24. In contrast to the UK, accreditation embraces colleges, particularly vocational colleges, which operate 'for profit'. The USDE needs to be clear that its financial aid to students does not support excessive profits. Hence accreditation also covers financial viability and some administrative practices.

25. Many commentators identify this wide coverage of accreditation as its main problem. Colleges generally put up with accreditation as a not too troublesome means of resisting further external regulation. Some see the process as helpful in setting college measures for internal control and in exchanging experience. Many private colleges (e.g. in Minnesota) do not like the link with financial aid. They believe that accreditation is not designed for colleges and does not recognise the importance of developing high quality through the quality processes in the colleges. Others point to the significant cost of external accreditation, in connection with both the agency costs and the cost for colleges in preparing for and participating in agency visits. It is also pointed out that accreditation is designed for undergraduate level work and does not concern itself with higher level teaching. Nor does it currently accommodate well developments in e-learning.

26. Some commentators, including higher education consultant Art Hauptman, argue that accreditation should have a more restricted coverage and that reputable colleges should be allowed to accredit themselves.

27. On the other hand, David Dill from the University of North Carolina believes that there is some evidence (6) that the traditional collegial processes by which universities assure academic standards may be deteriorating in the US. Many public policies being advocated to assure academic quality are likely to be ineffective because they address the wrong problems. *'This is particularly likely to be the case with accreditation systems that focus on the quality of university inputs rather than on academic processes and academic outcomes'*. The agencies have not yet developed an effective way of assessing student outcomes. David Dill favours an approach similar to that now adopted by the QAA through institutional audit.

28. As to the operational aspects of accreditation, a critical commentary by George Leef and Roxana Burris (7) states:

'Another drawback to the usefulness of accreditation is the fact that there is a high degree of collegiality in the process. The accreditation teams that visit and evaluate schools are not drawn from independent experts, but instead are generally composed of college and university personnel from other schools in the region, people whose own schools will be evaluated by a team which might include someone from the school under evaluation. Greenberg

observes that the accreditation system is premised upon collegiality and assistance rather than requirements that institutions meet certain standards'.

29. Some accreditation agencies (the North Central Association and the specialised Teacher Education Accreditation Council) are now beginning to examine ways of auditing and strengthening academic processes as a means of promoting quality. This would bring the process of accreditation closer towards QAA audit practice.

30. There are fewer commentaries available covering specialised accreditation. Art Hauptman favours the specialised approach over institutional accreditation. However, a review of specialised accreditation by David Dill in 1998 noted the emphasis of specialised agencies on protecting jobs, status, and incomes rather than academic quality.

Assurance through the market

31. Consumers do not have a ready access to reliable data on either the price or the quality of the product. As noted already, the price depends on the outcome of complex financial aid considerations. For information about quality, the higher education market in the US has relied mainly on privately published annual guides (e.g. Petersons) and annual attempts at systematic comparisons (e.g. US News). Increasingly, students and parents engage in a search process on the web. Colleges are investing substantial sums to improve their web-sites which are then picked out by web-based search programmes. Many colleges depend extensively as well on campus visits and alumni connections. This is particularly the case for the small and popular Liberal Arts Colleges, which stress the importance of individual attention. Many of the elite research universities have outreach programmes designed to recruit the best students from around the US.

Commentary

32. Many observers in the US within and outside the academic community have suggested that market forces alone may be sufficient to assure the quality of teaching and learning. However, that would require reliable information about the quality of teaching and learning. Present rankings of colleges rely as much on prestige and reputation as on any assessment of quality. Reputation is often based, at least in part, on excellence in research. There is a risk, especially in the research universities, that market forces lead to a direction of income into research rather than teaching.

33. A study by the Rand Corporation in 2001(8) raised serious concerns about whether the existing structure of market competition in the US achieved the outcomes desired by society. The study showed that colleges just below the elite seek to build their reputation not through pedagogical improvements or through meeting new types of demand. Rather they focussed on enhancing their reputation by increasing selectivity in the admissions process, by offering discounts for merit, and by investing in student residences and catering facilities. This approach is reinforced through commercial ranking systems which make use of aptitude scores for students on entry. In short, a market-based approach to quality assurance requires improved information about the teaching and learning experience for students.

34. A study of the operation of the market in the US (Hoxby 1997)(9) pointed out that the declining costs of transport, and the advent of reciprocal agreements between states over the admission of out-of-state students, had increased competition for the bachelor degree market. This had been complemented by improved bilateral flows of information between students and colleges. The impact had been a reduction in the monopoly power of some state-funded colleges in particular.

35. A review of these and other studies (David Dill 2002)(6) concludes:

‘As other countries expand and restructure their higher education systems permitting and encouraging greater amounts of competition, the potential exists for market imperfections similar to those identified in the US. Whether present experiments with external quality regulation will prove efficient in correcting information failures in higher education markets is still an open and debatable question. But in this early, formative stage of market competition in many countries it would appear that allowing the market to rule in higher education would be a particularly naïve choice for policy makers.’

Funding to support the securing of quality and standards

36. The traditional funding model adopted by states has relied on broad measures of input such as enrolments, expected ratios of staff to students, and price indices for staff salaries and library books. In over half the states, this approach has been supplemented with performance-based funding. The two states (Missouri and Tennessee) which pioneered this approach increased the proportion of the budget allocated in this way – to over 5% in the case of Tennessee. However, the approach has now been suspended in Missouri because of funding constraints.

37. Generally, the pattern for performance funding has been to include a mixture of input, process and output measures. Simplicity and measurability are key factors.

38. Tennessee has adopted the following points system in its performance-based funding:

Points for 4 year courses

Standard 1 Academic testing and programme review

Foundation testing of general education outcomes	15
Pilot evaluation of other general education outcomes	5
Programme accountability	-
Programme review	10
Programme accreditation	15
Major field testing	15

Standard 2 Satisfaction studies

Student/alumni/employer surveys	10
Transfer and progression	5

Standard 3 Planning and collaboration

Mission distinctive institutional goals	5
State strategic plan goals	5

Standard 4 Student outcomes and implementation

Retention	5
Employment	-
Assessment implementation	10
Total	100

39. The operation of the scheme has been drawn up in consultation with the colleges. There is a graduated scale of points awarded according to the college's success in meeting each indicator. For example, the points awarded for the number of accredited programmes range from 0 for below 70% of programmes to 15 for 100% of programmes. The indicator for programme review applies to non-accreditable programmes; points range from zero to 10 according to the number of such programmes reviewed and the proportion meeting acceptable standards. Colleges are required to submit their achievements for each indicator to their governing body by 1 July and thence to the Tennessee Higher Education Commission by 15 July. Based on these submissions, the commission determines the total score and hence performance funding for each college

40. In Missouri, the selected indicators were:

- national assessments of bachelor graduates
- the admission of ethnic minorities (African-American)
- first year success rates
- the performance of graduates
- successful transfer from community colleges
- the quality of prospective teachers
- the quality of incoming graduate students
- graduation rates
- campus-level initiatives.

41. There are two other relevant aspects of state funding in the US. Some states, for example California and Wisconsin, have established a state system for higher education which sets the missions and varying fees for constituent colleges. In Wisconsin, the system has determined that Madison is the main research university and that the missions of the remaining mainly teaching universities should be complementary. The state system sets tuition fees for Madison some 10% higher than for the teaching universities. Hence the system has a significant planning role – which effectively overrides any market approach.

42. Colorado has developed a voucher system for funding higher education institutions from 2005. The voucher or stipend for students will be worth up to \$2,400 a year for students at state-funded institutions and \$1,200 for students at private institutions. Tuition fees will continue to be charged to provide income for colleges in addition to funds flowing from the stipends.

43. The aim is to allow institutions maximum freedom in responding to the needs of students. Many regulations will be lifted. But institutions wishing to cash in the

stipends will be expected to sign up to a performance contract with the Colorado Commission on Higher Education.

44. Each in-state student will be eligible to receive stipend funding for up to 145 credit hours. This should be sufficient for most undergraduate degrees which require a minimum of 128 credit hours. There are maximum lifetime limits for continuing students.

45. The performance contracts will include the following measures:

- tuition increases will be limited to inflation. Higher increases will only be considered if the institution demonstrates that the additional funds will be used to improve quality and access for students
- institutions will be required to introduce a core curriculum – to ensure students can graduate in four years having completed a rigorous core curriculum of maths, science, history, writing, and critical thinking
- non-core courses will be eliminated to reduce costs
- institutions will establish a pay plan for staff which emphasises teaching and research performance; and will report on how performance is measured
- institutions will address grade inflation and report the distribution of grades in each department
- institutions will increase recruitment, retention, and graduation rates for students especially for under-represented low-income male and minority ethnic students
- institutions will improve preparation of teacher candidates for secondary schools.

Commentary

Performance-based funding

46. The impact of performance-based funding has been disappointing. The main problem has been that the funding has not been seen as an integral part of the funding approach adopted by states.

47. Recent research on the Tennessee Performance Funding Initiative (Fairweather and Beach 2002)(10) and (Dill, the Regulation of Academic Quality)(6) has shown that there has been little impact on staff attitudes or behaviour. This is because the performance measures (above) focussed on indicators such as graduate employment and pass rates, rather than on improvements in curricula or teaching. Furthermore, improvement funds were awarded to the central university rather than to academic departments demonstrating quality enhancement. Administrators sought to offer the best data to fit the funding formula, while shielding academic staff from the burdens of complying with the programme.

48. In Missouri, the state has been able to demonstrate some improvement for most of the indicators. All the colleges have developed campus-led initiatives for teaching/learning projects. Nevertheless, these have not been judged to have sufficient priority to retain performance-based funding links.

49. No doubt some of these initial problems could be resolved. The key issues are the integration of performance funding into or alongside the main funding formula, and the choice and availability of suitable measures to achieve real improvements.

System planning

50. The system approach in California and Wisconsin has a significant planning role – which effectively overrides any market approach. It would seem to cut across current policy in England and is, in any case, costly. In Wisconsin it takes up some 6% of the total state budget for higher education.

The Colorado voucher scheme

51. The voucher scheme in Colorado is to be introduced in 2005 and cannot be evaluated at this stage. The cost of the vouchers or stipends will be similar to what is currently being spent on funding for higher education. However, there are many who believe that the scheme has been devised to camouflage reductions in the higher education budget in earlier years.

52. Because students will present their stipends to colleges, this does not constitute state funding and colleges do not need to meet certain regulatory requirements. Tuition fees will continue to be charged to provide income for colleges in addition to funds flowing from the stipends.

53. For a market-based scheme, it is surprising that the state commission is retaining so much control through the performance contracts. This, however, reflects a desire to respond to public concern about quality – a concern that might otherwise be reinforced by the introduction of the voucher scheme. It remains to be seen whether these contracts will lead to real improvements in the teaching and learning provided by academic departments.

54. On the other hand, the state commission has confirmed that it will, if necessary, seek additional funding from the state government if student enrolment exceeds the estimate used for calculating the cost of stipends. Hence, there is an incentive for colleges to recruit, especially since the income from tuition fees together with the voucher is likely to exceed marginal costs. Colorado currently has comparatively low participation rates.

Conclusions

55. Any assessment of the US higher education system needs to have regard to its immense diversity. Many of the colleges – the elite research universities – lead world-class ranking tables. Some other colleges would be at the other end of the tables. Any generalisation of experience in the US needs to be treated with caution and the transfer of experience should have regard to the context.

External quality assurance through accreditation

56. External scrutiny of quality in US colleges through accreditation may have served its purpose of establishing some minimum standards so as to safeguard the proper use of financial aid to support tuition costs. Employers also use college accreditation as a check in selecting graduates for recruitment. Generally, however, accreditation has had little impact on improving quality in the not-for-profit higher education colleges.

57. The plans for more emphasis on outcomes and auditing internal quality control processes should improve the effectiveness of accreditation. However, the current

legislative proposals would extend the remit for accreditation and increase the burden on colleges. A more radical review would seem to be needed.

58. Some believe that accreditation should be reserved for the weaker colleges and those 'for profit'. Others could be relied upon to 'accredit' themselves. Although this would have some merit, setting the dividing line would no doubt be difficult.

Assurance through the market

59. Although the variable fees and the market established in the private and public sectors ought in principle to encourage parents and potential students to have regard to quality in choosing a college, the quality of the information available limits the impact of this. Reputation is often adopted as a substitute for a measure of quality. In order to improve reputation, income may be invested in research rather than in improving the quality of teaching. Elite private institutions, in particular, do however strive to maintain or improve their position by placing emphasis on internal quality assurance processes. There is emphasis too on measures to recruit the best students.

Funding to secure quality and standards

60. The level of resourcing for higher education in the US is substantially higher than elsewhere in the world, and more than twice the level per student in the UK. The impact of this can be seen through the success of the elite research universities.

61. Concerns about quality in state colleges (despite mandatory accreditation) have led to the introduction of performance-based funding in over half of the states. Links between funding and performance have however had little impact so far on quality. There is an inherent difficulty in increasing the proportion of funding subject to performance. If those with poor performance lose substantial funding, their performance becomes even more difficult to improve.

62. Planned systems of funding state colleges seek to offset the impact of the market.

63. The voucher system being introduced in Colorado is worthy of further study in the light of experience. There would seem to be merit in a funding system which leaves most of the allocation of public funds for teaching to the market, and offers a way of influencing the internal allocation of sufficient funds to support quality.

Lessons for the English system

64. The existence of both state-funded and private colleges in the US complicates the operation of the higher education market. In principle, the existence of a single group of institutions in the UK (classified as private but receiving public funds) ought to offer a more coherent market. State-funded colleges in the US are subject to more regulation (sometimes covering specific initiatives at the behest of wider political interests) than private colleges.

65. There is a relationship in the US between quality as measured (imperfectly) by league tables, including tables of world rankings, and funding levels. Funding levels vary mainly because of differential fees. There is a greater variation of quality than in

the UK. It is inevitable that an unfettered fee regime in England would also lead to increased variation in quality of teaching.

66. There are differing views about the effectiveness of accreditation in the US, but the evidence suggests that accreditation as practised there is less effective than QAA audit and the external examiner system taken together. The present UK arrangements arguably place a larger burden on institutions. Current proposals in the US for extending the remit of accreditation (and increasing the burden) in part because of the existence of 'for profit' colleges seem unlikely to be relevant in the UK context.

67. Specialised accreditation in the US faces the same problems of self-interest, as is the case in the UK with some professional bodies.

68. The impact of the market on the quality of teaching is dependent on suitable comparable information being available to parents and students. Priority should be given to developing and promoting the measures already being taken to provide comparable information in the UK. In the absence of reliable measures, institutions may be inclined, as in the US, to invest some of the new income in research so as to improve their reputation. Improving reputation in this or other ways may help an institution to recruit more able students. But, given that the range of ability is not elastic, this may not improve the effectiveness of higher education generally unless there are improvements in the quality of teaching and learning.

69. Subject to this, the evidence of the supremacy of elite, mainly private, research institutions in the US is that regulation stifles initiative and enterprise which a market is intended to promote. Subject to arrangements to assure minimum standards, the aim should be to reduce further the burden on institutions of external quality regulation and of external regulation more generally – especially for high quality institutions.

70. There is little evidence to suggest that the performance-related funding schemes introduced by many US states have been successful in improving the quality of teaching and learning.

71. The Colorado voucher scheme, to be introduced this year, is of interest because it embraces both private and public colleges. In terms of presentation, it reinforces the market approach. It also provides a mechanism (performance contracts) for assuring minimum quality. Even though it has apparently been devised to obscure past funding difficulties, it would be worth studying again in the light of experience after two or three years.

Annex A

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