



Learning entitlements in higher education

*International practice and experience with learning entitlements in higher education:
Australia, Colorado, Germany and the Netherlands*

A study for the University Grants Committee Hong Kong

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1 Introduction

The University Grants Committee of Hong Kong (UGC) has asked whether CHEPS can conduct an update study on vouchers in higher education. The previous study on this topic by CHEPS (Ben Jongbloed and Jos Koelman) dates back to 2000. That study discussed the principle issues and theoretical backgrounds of funding higher education through vouchers as well as an overview of the practical use of vouchers in education across the globe. The envisaged current study should update this information with new analytical perspectives and most recent practices in higher education.

Research questions

The UGC particularly requested CHEPS to conduct a limited study into the model and potential experiences with some recent voucher-type practices in higher education. Addressing this question CHEPS thinks that the recent developments in Australia, Colorado, Germany and the Netherlands are most relevant.

In Australian higher education so-called learning entitlements have been introduced in 2005. In the same year, the tuition stipend was established by which Colorado's college students will bring with them a state taxpayer-funded higher education voucher. Also in the Netherlands plans have been accepted by Parliament to adopt learning entitlements as from the academic year 2007-2008 onwards. In addition, we can elaborate a bit on the limited "voucher-experiment" in a limited number of Dutch colleges a few years ago, even though the result was "disappointing". Also in some German Länder they try to limit long duration of study by levying fees for those exceeding the normative duration of study and by some form of vouchers called *Studienkonten*.

For most of these "learning entitlement" practices there are no results yet, so expectations should not be too high in that area. Nevertheless, the debates in the four countries which led to the actual implementation of voucher-type funding schemes can already be called remarkable in the background of higher education.

In the following chapters the concept of learning entitlements or vouchers will be further explored, the specific case studies will be described and some conclusions will be drawn. In Chapter 2 the basic ideas and principles of voucher type education funding will be addressed. Chapter 3 deals with the Australian case where in 2005 learning entitlements were introduced. The Colorado experience is put in the spotlights in Chapter 4. Germany has shown a number of voucher like funding mechanisms in some of its Länder. This is discussed in Chapter 5. In Chapter 6 the Netherlands' proposal for a funding system based on learning entitlements is discussed. This proposal has passed parliament but the Senate recently delayed the implementation of the system. Nevertheless, the debates and expected problems form an interesting case for looking at this issue. Finally, in Chapter 7 some overall conclusions will be drawn and put in a wider perspective of funding developments.

2 Education learning entitlements¹

2.1 What are learning entitlements or vouchers?

This report is about international experiences with learning entitlements. Basically, the term learning entitlements is a new phrase for what used to be called “education vouchers”. This means that we will use the terms vouchers and learning entitlements as synonyms in this report. Both learning entitlements and vouchers are used as a specific way of funding (higher) education. Instead of the government allocating subsidies directly to the providers of education, the government is channelling the subsidies through the consumers. The former – object subsidies – represents the most common way of allocating public money to education. The latter represents a way of subsidising the producers (schools, universities) through students (or their parents). As students can spend these subsidies only on education, vouchers in fact are an *object-subject subsidy*, students do not experience an increase of their free disposable income.

In a voucher scheme the consumer receives a coupon (*voucher*) which represents a certain amount of money to be spent on education. The voucher is a kind of “coupon with a prescribed purchasing power, over a specified service” (Blaug, 1967). The value of the voucher is related to some notion of the average per capita costs of (a specified amount of) education. When a student chooses for a specific institution of higher education (HEI), the HEI redeems the value of the voucher(s) from the Ministry of Science and Education. The effect of vouchers is that HEIs can only acquire public means by attracting students and their vouchers. This implies HEI's have to compete for public funds and students (or pupils) are encouraged to seek the provider that best satisfies their demands. In doing so they can choose from a range of providers.

Some authors, like West (1996), use a much broader definition of vouchers. In their definition one can speak of a voucher system whenever “funds follow the child (or student)”. This includes all arrangements in which governments make either direct or indirect payments to an educational institution whenever a student (or pupil) enrols in that institution. However, in our definition we exclude the direct payments and restrict ourselves only to the indirect payments. Thus, an essential element of a voucher scheme is that individual students are receiving government subsidies – either in terms of real money, or in terms of entitlements to a given amount of education – to be spent at the educational institution of their choice. Vouchers thus are a form of *demand side* funding. Student choice drives the funding. According to the broad definition of West a system of funding educational institutions on the basis of a formula where the number of students (or pupils) is the central parameter (i.e. the funding base) would also be a form of voucher funding. In our view, however, this would be regarded as a form of *supply side* funding. Following the voucher definition of West, voucher systems might be said to exist in quite a lot of higher education systems, e.g. in Chile, the Netherlands, or Sweden (see Carnoy, 1998; Parry, 1996 and 1997). However, in our less broad definition, these are examples of countries where in fact the *supply side* receives the government subsidies.

¹ This chapter is mostly based on the previous CHEPS report on vouchers for the UGC Hong Kong, Jongbloed and Koelman, 2000.

The crucial aspect of the voucher idea is *freedom to choose* and this, according to Barr (1998), would require that education is not just provided by public institutions but also – or at least in part – by *private* institutions. So, students would be allowed to cash their vouchers also at private institutions that – just like the public ones – comply with minimum quality standards.

2.2 Pros and cons of vouchers

There is no ideal method of funding education. Every system of funding arrangements has its advantages and shortcomings, partly related to the set of goals the government is pursuing. Moreover, the balance of argument changes over time. Dissatisfaction with the existing systems of (public) funding - e.g. no freedom of school choice in compulsory education with respect to public schools - has led, especially in the United States, to a number of suggestions for change, and perhaps the most prevalent of these has been suggesting the provision of vouchers for education (see section 3).

Vouchers for education is not a new idea. West (1967) traces its origin back to Tom Paine's Right of Man (1790), although recent interest in the idea dates from the 1960s. In fact, there are many different voucher schemes, even though the differences are sometimes small. The modern development of the idea is usually attributed to Friedman (1962), an economist strongly committed to market forces as a means of allocating resources (see section 2.3). The most influential of other voucher versions usually is associated with the name of Jencks (1970).

Especially in the United States, and to a much lesser extent in the United Kingdom, a sometimes heated discussion has been pursued between proponents and antagonists of education vouchers. Both sides, however, agree that the effects of a voucher system would depend on the precise details of any scheme that might be introduced. In Mason's (1975) words: "It is impossible to generalise from a particular voucher plan as the outcomes are a function of the very specific arrangements inherent in any particular plan".

Even though the majority of articles about vouchers address vouchers in primary and secondary education and literature on vouchers in higher education is very rare, we will address some of the pros and cons of vouchers. Some of the arguments may perhaps be less relevant for post-compulsory education (including higher education), but it is good to take notice of them when addressing the relevance of vouchers for higher education.

Advantages of vouchers

The most important argument put forward in favour of vouchers is that they would increase freedom of choice. There is a widespread belief among economists, even those who do not necessarily support vouchers, that education is producer dominated in the sense that decisions as to curriculum, modes of teaching and assessment, for example, are taken largely by teachers or professors, though within the boundaries set by educational authorities, like ministries and accreditation agencies. Parents and students often do not have a strong direct influence on the content of teaching programmes and on the modes of delivery. It is argued that like a market system provides the kinds of goods consumers demand, its extension to education would also make education providers more responsive to the wishes of parents or students. Under a voucher scheme, the suppliers of (higher) education would be more responsive to the needs and preferences of their customers. This would help to create a wider variety and flexibility in the provision of education. Education institutions would have to provide

more information to parents and students on the quality of their services, thus strengthening the choices made by their clients and increasing the effectiveness of schooling.

The educational institutions which provide the kind of education that people want, will attract relatively more clients (pupils; students) and hence have more money to secure their existence. Successful providers would be able to raise the quality of their services (e.g. by spending on equipment or the teachers' salaries), or perhaps to be able to make a profit. Vouchers would enforce the discipline of the market on the providers of education, just as it does on the producers of automatic coffee makers. The introduction of market forces leads to competition and competition will strengthen efficiency, because only the most cost-effective providers will be able to survive.

Protagonists of education vouchers often mention another advantage, namely that a voucher system will allow more money to be spent on education, even in times of financial stringency. If parents are allowed to "top up" the value of the voucher provided from public funds, then the total amount spent on education will increase, because many parents would be prepared to supplement vouchers out of their own private income.

Some proponents of a voucher system also claim that vouchers would encourage greater quality of opportunity. The reason for this is that inequality of opportunity is caused by the inability of the lower income family to buy itself out of a bad school and into a good one. Greater quality of opportunity would at the same time lead to racial integration. Open-administration policies (with over-subscribed schools allocated by lottery) and minimum minority enrolments in participating schools have been proposed to avoid racial pitfalls. The schools would be more responsive to the educational needs of minority groups (Davis, 1983).

Disadvantages of vouchers

On the other hand, opponents of education vouchers have numerous arguments against the introduction of vouchers. The first argument, regarding the issue of choice, is that parents are not competent to choose schools and to assess the quality of education provided, either because they are likely to be seduced by flashy marketing or because issues such as the curriculum are a matter for professionals.

Another argument against vouchers is that choice in education is limited by geographical factors in many areas. In rural areas there is often one school within reasonable travelling distance. Puckett (1983) notices that, curiously, the major voucher models under discussion have nothing to say about rural school participation in either a state-wide or nation-wide voucher program. Most voucher proponents have a metropolitan situation where diversity is possible (at least in theory) in mind. According to Puckett, in the U.S. voucher-type programmes have actually been in place for decades in rural areas (e.g., in Vermont). Such programmes have been implemented without the "fanfare" surrounding the Friedman and Jencks proposals (see section 2.3). In these rural areas a school district that only can afford one elementary public school, for example, allows parents to choose a school in neighbouring districts and then pays their expenses.

There are two additional arguments against the statement that a voucher system would increase freedom of choice. Firstly, according to Wagner (1974), choice is limited. He argues that all a voucher will do is to allow parents to state their preferences. If particular schools are over-subscribed then the actual decision will be made by someone else. In his opinion, increased parental choice, if required, can be provided for administratively without the need for a complicated system of vouchers. Wagner notes that the fundamental lesson about parental choice is that effective choice depends on

resources. If there are sufficient resources to allow spare places in popular schools, then choice can be ensured without any need for vouchers. If no spare places are available, then a system of vouchers will not create them.

Secondly, preferences may be incompatible. Allowing choice to one parent may deny it for another. For example, parent A wants co-education and parent B chooses single education. This may be impossible, because two small schools can be hopelessly uneconomic.

Another argument against vouchers has been formulated by Hough (1987). He argues that the longer-term effects of the introduction of education vouchers would be that the popular schools would need to expand, contract more buildings, appoint more staff, whilst the unpopular (public) schools would decline in number or even have to close. This will result in an inevitable waste and additional expenses with places available in half empty schools. In general, vouchers would confront schools with massive fluctuations in funding and enrolment, meaning that teachers would suffer from non-professional interference and job insecurity.

Also it is suggested that elementary school teachers would be tempted to re-orient their teaching in order to produce those results seen as desirable to those middle-class parents who are most likely to exercise influence and choice at the expense, for example, of giving extra attention to disadvantaged or slow learning pupils.

Even some proponents of voucher schemes, like Levin (1998) come to the conclusion that the costs of an overall voucher system appear to exceed those of the present system. Levin concludes that "the shift from the existing system to a voucher system with a well-functioning school market place in which adequate transportation and information is provided will demand considerable additional resources for education beyond those allocated for educational vouchers and instructional services". Levin and Driver (1997) estimate that the public costs of a voucher scheme in a representative US context could raise public educational costs by 25% or more.

Most voucher models claim to ameliorate social disjunction. Opponents of voucher schemes, however, claim that the opposite will be the case. Vouchers would increase segregation, because all major voucher models contain mechanisms of economic and racial segregation. Society, from a moral and political view, can decide that choice on the basis of racial grounds is unacceptable, but choice on the basis of curricula, religious and moral values, or intellectual ability will lead to outcomes that strengthen segregation. Families that are better-off will be more likely to take advantage of school choice, leaving the worse-off behind (Puckett, 1983; Waring, 1996).

A final argument against a voucher scheme is that it would be accompanied by practical difficulties, especially because of additional administrative efforts. Vouchers imply a large effort in terms of keeping track of individual training careers.

Final remarks

From the short overview of pros and cons to vouchers it is difficult to formulate a conclusion on the relevance of vouchers in general. Even more so, because the effects generated by the voucher scheme will very much depend on the exact characteristics of the scheme (Oosterbeek, 1998). A large variety of voucher schemes can be identified. Johnes (1993), starting from a list of twelve basic questions that relate to the lay-out of the voucher scheme (see Appendix 1), argues that, depending on the answers given to these questions, over 4000 different voucher schemes can be identified. All of the questions relate to government regulation issues. Some of the most important regulation issues are: (a) the issue whether the voucher covers the full cost or only part of the cost of the programme or the educational institution, (b) whether there is some form of preferential treatment for disadvantaged families, (c) the selection mechanism

used to allocate student places in schools that are over-subscribed, (d) whether all parents can re-choose schools each year, (e) whether both public and private providers are included in the system, (f) the range of programmes that is covered by the system, (g) whether educational providers are allowed to charge fees on top of the voucher; et cetera.

Clearly all of these – and a lot of other – issues are important and would require detailed consideration if a voucher system were to be introduced. The next section describes a few of the voucher systems that were put forward in literature.

2.3 Voucher models

Especially for compulsory education, several different voucher proposals have been put forward in literature. Below we will discuss three well-known voucher models for financing compulsory education. For higher education, voucher schemes are rare. The most elaborated and consistent plan seems to be the model proposed by Levin (1983). This model, containing five key elements, will be presented in the next section.

Two schools of thought

Ever since Milton Friedman published his ideas, the voucher concept has received a lot of attention from contemporary economists. Friedman was the first economist credited with the idea of educational vouchers as a means of restoring market competition in education, while still having the government supply financial support. Following Friedman, several other economists, especially from the U.S. and the U.K., have further analysed the voucher concept. In fact, two schools of thought corresponding to two dominant final objectives of the voucher, namely the liberal market approach and the social policy approach, can be distinguished, represented by Friedman and, respectively, Jencks. The liberal market approach has dominated the discussions in both the U.K. and Australia. In the U.S. both approaches coexist.

An important similarity between the approaches of Friedman and – on the other hand – Jencks is that both are aware of the fact that the lack of competition in the public sector has an ossifying effect. Uneasiness exists about the constraining influence of bureaucratised education on individual parental decision-making. The only way for schools to perform better is – according to both Friedman and Jencks – a subjection of schools to more competitive pressure. Levin (1968) puts it in the following way: “The fact that the new left (Jencks) and the old right (Friedman) can occur on the same educational palliative is reason enough to consider the market approach as a serious alternative to the present system”.

The market model of Friedman

Friedman (1962) distinguishes between three kinds of education: compulsory education, higher education and vocational training. With regard to compulsory education he argues that this has to be funded by “giving parents vouchers redeemable for a specified maximum sum per child per year if spent on ‘approved’ educational services”. Regarding higher education, Friedman presents a similar proposal. Furthermore, he advocates freedom of price fixing (i.e. the setting of fees) by the institutions. In Friedman’s version the value of the voucher is the same for each child, and it can be spent in any school that has been approved to take part in the system. This would include both private and publicly owned institutions. The schools are allowed to charge supplementary fees on top of the value of the voucher and have complete freedom in their choice of pupils and organisation of waiting lists (entry

requirements, selection mechanism). According to Friedman the advantage of his voucher scheme is an increase of more effective competition between schools, resulting in an efficiency improvement, less claims of private schools on governmental financial assistance, and better opportunities to control governmental expenditure for education.

With respect to vocational training, Friedman argues that there are no 'neighbourhood effects' (i.e. external effects) which would call for government funding. He claims that vocational training is an investment in human capital, analogous to investments in physical capital. Therefore, he advocates the establishment of a fund (a loan facility, or individual learning account) on which students have a drawing right. Repayment of the borrowed money should be related to the additional income that graduates earn as a result of the vocational training they received.

This concise description of Friedman's ideas about vouchers and the funding of education shows that he proceeds from a strict neo-classical framework. He pays a great deal of attention to efficiency issues and less to issues of equity, such as access to (higher) education. In Friedman's voucher scheme, schools (or universities) are allowed to charge additional fees. This may lead to the effect that lower income groups can not afford to send their children to high-tuition schools. This 'shortcoming' has led others to propose amendments to the Friedman voucher scheme.

The income-linked market model of Peacock and Wiseman

A well-known amendment of Friedman's scheme is the voucher model of Peacock and Wiseman (1964). Although in their model freedom of choice for consumers of education is also a central issue, at the same time they are aware of the importance of access to education. Accessibility may become an issue if consumers, as a consequence of the right of schools to set their own tuition fees, have to pay higher fees than the value of their vouchers. Access to education then may become income-linked. In order to avoid such 'unfair' effects, Peacock and Wiseman propose to consider a voucher as a part of the taxable income "... so that under a progressive income tax system the rich would not retain its full money". Of course, the most important question remains whether an income-linked voucher scheme does justice to the differences between income groups with respect to the ability to pay.

The principal element in this model is that the value of the voucher is higher for children from low-income families by making the voucher value subject to income taxation. However, although Peacock and Wiseman acknowledge the equality of opportunity as an important social objective, they explicitly opt for a liberal market approach.

In practice it is unlikely that the difference between the voucher issued to low- and higher-income families would represent the difference in purchasing power between low- and higher-income families. Jencks (1970) notes in this context that "legislatures may provide poor parents with slightly larger vouchers than rich parents, but (...) the difference is not likely to compensate the poor for their inability to spend private funds on education".

The compensatory market model of Jencks

Jencks is the most articulate representative of the social policy approach, that emphasises the equality of educational opportunity as a policy objective. In Jencks' opinion vouchers would offer an alternative for the failing public schools and would favour the relatively poor parents. The model he proposed has three main characteristics:

- It favours the market and competition among suppliers, but market competition ought to be regulated to become effective.
- It introduces a compensatory element in order to avoid economic, religious and racial barriers and to promote social mobility between classes.
- Schools where demand exceeds supply must allocate at least half of their places by ballot.

The compensatory model is characterised by the fact that schools may not charge tuition beyond the value of the voucher. This implicates that schools accepting children from better-off families would not have greater income than schools with a preponderance of children from poor families. The opposite would be the case, because children from poor families receive a second, compensatory voucher that is inversely related to income. In Jencks' scheme schools with pupils from low income-families receive additional funding.

The total amount of funding the schools receive depends on the number of students they are able to enrol. As mentioned above, schools are not allowed to ask or accept fees for education in excess of the voucher value. This holds true even in cases parents where are willing to supplement ('top-up') the voucher value. Due to this principle Jencks' voucher scheme aims at prevention of social and economic segregation, i.e. children cannot be excluded because of the inability of their parents to pay. Disadvantaged pupils receive on top of the basic voucher a second, compensatory voucher.

The compensatory model of Jencks introduces the market mechanism to eliminate the prevailing monopolistic privileges of schools (in the U.S.). However, the market mechanism is regulated at the same time (fixed prices, compensatory vouchers) to avoid the negative effects of a completely free education market.

Concluding remarks

Above has been dealt with the essence of three voucher models. However, many other voucher schemes could be proposed (see e.g. Johnes, 1993). In voucher schemes there always will be a trade-off between individual freedom of choice (efficiency) and equality of educational opportunity (equity). Complete individual freedom of choice results in inequality of educational opportunity. Van Gendt (1990) formulated this dilemma in the following way: "Because of the situation that one instrument is supposed to be instrumental to two objectives that are not obviously compatible, one has to make concessions to the effectiveness of the instrument for one of these objectives or for two separate objectives."

The Jencks scheme has more of an equalising effect on expenditure. Both exponents of the liberal market approach (e.g. Friedman) and the social policy approach (e.g. Jencks) are concerned with consumer sovereignty and efficiency, but proponents of the social policy approach, like Jencks, place more emphasis on distributional goals.

In section 2.2 it has been argued that voucher schemes, in the view of its proponents, will increase efficiency and enhance consumer sovereignty. Parents choose their child's school and education is (partly) privately produced and competitive. Schools are forced to be responsive to parental demand. To opponents of voucher schemes, however, the efficiency advantages are debatable and the equity effects almost certainly undesirable. The efficiency issue is strongly related to the answer to the question whether parents are sufficiently well informed about the standards of their child's school and, if not, whether a publicly organised inspectorate will be more effective judging the standards of public and private schools. With regard to equity, opponents of voucher funding argue that voucher schemes will increase inequalities in

the distribution of education (both quantity and quality) by social class, though less so in the case of a Jencks type of scheme than under a liberal market approach such as the Friedman model. As Barr (1998) notes, vouchers might well have advantages for middle-class families, but only at the expense of less-well informed choices by lower socio-economic groups. The equity issue therefore can be resolved to the question what relative weight should be given to the claims of these two groups.

Regarding voucher schemes, from our point of view two questions are of great importance:

- What empirical evidence is available about voucher schemes?
- Could the purposes that are underlying the idea of a voucher system also be pursued in alternative ways?

Question A will be dealt with in section 3. Subsequently, in section 4, attention will be paid to question B. First, however, we will discuss in section 2.4 the concept of vouchers in higher education and other forms of post-compulsory education.

2.4 Vouchers in higher education

Most of the voucher schemes proposed in academic literature concern compulsory education. Regarding higher education and other forms of post-compulsory education, voucher schemes are rare. The most elaborated and consistent plan seems to be the voucher model of Levin (1983). The Levin model contains five key elements (Oosterbeek, 1998):

1. Students receive vouchers (entitlements). Through their enrolment pattern they directly determine the amount of funding that higher education institutions (HEIs) will become. If a student spends a voucher to attend a specific programme at a HEI of his/her choice, the government is obliged to pay a pre-determined amount of money to the institution that offers the programme.
2. A prerequisite for a HEI to be eligible for governmental funding is that it must be accredited. Not only regular institutions, however, are considered for accreditation. In principle, every supplier of higher education courses that meets specific quality standards can qualify for accreditation. This means that new suppliers get a possibility to enter the market. Furthermore, by not restricting accreditation and governmental funding to the traditional suppliers of higher education, Levin's voucher scheme can also include on-the-job training programmes.
3. The voucher is not necessarily a grant, but may also consist of a mixture of grant and loan. The composition of the voucher, in this respect, may vary with the type of programme and student characteristics. For example, for studies that generate relative large externalities (see section 1), the vouchers contain a large grant component. Moreover, based on equity considerations, it could be considered to give vouchers with a larger grant-component to students from low-income families. Another policy option could be to endow students with lower initial ability with more vouchers than the other students. Finally, it is important to note that the possibility of a loans component in the voucher scheme creates the option to combine a voucher scheme with a loan scheme (e.g. where repayments on loans are based on the income earned by the borrower).
4. Vouchers retain their real value during the entire lifetime of the owner. This makes it possible to combine a voucher scheme with the policy goal of lifelong learning, which is becoming more and more important in a knowledge-based economy.
5. Information plays an important role in a market system, such as a voucher scheme. Therefore, Levin is aware of the need to provide accurate information to demanders and providers of higher education and proposes to establish a special agency to

collect and disseminate information about institutions and courses in the higher education system. Potential students should have quick access to relevant and accurate information about programmes, course contents, costs, quality of teachers, labour-market position of graduates, et cetera. At the same time, suppliers of higher education programmes should be well-informed about enrolment patterns and new labour-market requirements. The same agency that collects and disseminates information about institutions and courses, could play the role of administrator, bookkeeper, controller and collector of the vouchers.

According to Barr (1998), two questions are central for a discussion about vouchers in higher education. The first question is: are students capable of making informed choices? Barr comes to the conclusion that in higher education consumer tastes are diverse, degrees are becoming more diverse, and change is increasingly rapid. The most important reason for these developments is the increasing complexity of our post-industrial society. In Barr's opinion students are more capable than central planners of making choices on what they want to study and where they want to study. In his view, the goal of (increasing) consumer sovereignty can be regarded as more relevant for higher education than for compulsory education.

The second question is: how useful is competition? Barr concludes that it is a huge mistake to think that a simple-minded voucher model (HEIs compete for students; those who attract large numbers flourish, those who fail to attract enough students will not survive) is the only approach to competition. He argues that "vouchers should be thought of as a continuum, from 0 per cent constrained ('law of the jungle') to 100 per cent constrained ('pure central planning') or anywhere in between." Policy-makers should consider a variety of constraints in choosing their position on this continuum:

- Protecting subjects. Some courses (e.g. classics) need special protection, others need less protection. This can be arranged by tying some vouchers to specific subjects.
- Protecting institutions. For reasons of regional balance it could be necessary to tie vouchers to universities in particular parts of the country.
- Protecting individuals. There are good reasons to offer larger vouchers to students from low-income families.
- Protecting quality. One of the bests arguments in favour of competition is that competition creates a strong incentive for HEIs to offer quality to their students. Nevertheless, at the same time it is important to protect standards, for example by monitoring quality and publishing the results.

All in all, Barr concludes that vouchers allow governmental intervention to foster both educational and distributional objectives. The degree of competition is a political matter with different possible policy answers. We would like to add to Barr's conclusion that vouchers are not the only approach to competition. We will work out this statement in section 4.

3 Australia

3.1 Wider policy changes in higher education

Based on a review of Australian higher education in 2002, the Australian government introduced a number of higher education reforms in 2003. The backgrounds of these reforms can be found in the policy document *Our Universities: Backing Australia's Future*.² These reforms took effect in December 2003 when the Higher Education Funding Act of 1988 was replaced by the Higher Education Support Act 2003 (HESA). One of the elements of this reforms was the limitation of the amount of education Australian citizens were entitled to by the introduction of learning entitlements.

The Higher Education Reforms

The future direction of Australian higher education consists of an integrated policy framework based on the four foundation principles of sustainability, quality, equity and diversity (DEST, 2004a). The reforms with a horizon of 10 years aim at establishing a partially deregulated system of higher education in which individual universities are able to better capitalise on their particular strengths and determine the value of their course offerings in the market place. In short, the reforms are envisaged to lead to more market orientation and to make the system more efficient.

There will be renewed emphasis on teaching and learning outcomes, greater recognition of the role of regional campuses and institutions, and a framework for research in which all Commonwealth funding is either competitive or performance-based. New arrangements for student financing will encourage lifelong learning and ensure equity of access to higher education. Also the market for private higher education will be opened up, while still enhancing quality control. Diversity will be encouraged through the creation of performance-based incentives for institutions to differentiate their missions. All of these ambitions are backed with new public investments in higher education, about \$10 billion in 2005-2015. There are three major elements to the reforms.

1. Support for higher education institutions. The Commonwealth Grant Scheme (CGS) will replace the current system of block operating grants to each university with a system in which the Commonwealth will negotiate with each higher education institution to deliver a specified number of Commonwealth supported places in particular course disciplines. This will ensure that universities provide the courses and the numbers of graduates that are needed by the nation. Each university will set its own student contribution levels (tuition fees) within the ranges set by the Commonwealth (see Appendix 2). To give higher education institutions more financial leeway, Commonwealth funding per student will increase, following institutions' adherence to a set of National Governance Protocols and compliance with Commonwealth workplace relations policies. However, most of the extra funds are strictly earmarked and may lead to extra bureaucratic regulations and activities. Higher funding levels will also be introduced for student places at

² <http://www.backingaustraliasfuture.gov.au/>

- regional campuses of public higher education institutions. There will be made available a substantial number of extra Commonwealth supported places.
2. Support for students. Student financing will be extended to a wider framework of income contingent loans under the new Higher Education Loan Programme (HELP). All eligible Australians will receive a Learning Entitlement of seven years of equivalent full-time higher education (extended on a pro-rata basis if studying parttime) with an extension beyond seven years where a student is undertaking an initial undergraduate course or pathway in which the normal enrolment period is longer than five years (e.g. medicine at undergraduate or graduate degree levels or double degrees with honours). Also the Higher Education Contribution Scheme (HECS), through which students pay their tuition fees will be upgraded, including an increase in the repayment threshold, the income under which graduates do not have to start repaying their debt, from \$24,365 (2002/03) to \$30,000 (2005/6). For the first time loans will also be offered to help students who are paying full fees in public and eligible private higher education institutions (FEEHELP). A third loan scheme will be established for students who need financial assistance to study overseas (OS-HELP). Commonwealth Learning Scholarships for educational and accommodation costs will remain to be offered.
 3. Support for a diverse and equitable system. Performance and incentive funding will be available to encourage universities to differentiate their missions and to achieve reform in the areas of learning and teaching, equity, workplace productivity, collaboration and quality.

3.2 Student learning entitlements

The previous section showed a whole package of reforms in higher education funding that accompany the introduction of student learning entitlements.

The Australian Commonwealth Government introduced the Student Learning Entitlement (SLE) in 2005 as part of the 'Backing Australia's Future' (BAF) reforms to the funding system for university students in the Higher Education Support Act 2003. According to the Department of Education, Science and Training (DEST), "The Student Learning Entitlement" will provide greater opportunities for more students to gain access to a Commonwealth supported place as new entrants occupy places freed by students who have used their SLE. To encourage lifelong learning, an individual's SLE will be extended after a specified number of years' (DEST 2004).

Having a Commonwealth-supported place (CSP) means that a student's tuition fees are subsidised through the Commonwealth Grants Scheme (CGS), with students required to contribute to the cost of their university education through a Higher Education Contribution Scheme (HECS) fee. Australian citizens and permanent humanitarian visa-holders are eligible for HECS-HELP loans. Other CSP students must pay their HECS fee up front (DEST, 2006b).

Upon enrolment in a CSP, students receive a Commonwealth Assessment Notice (CAN) informing them of their Commonwealth Higher Education Student Support Number (CHESNN), through which students will be able to track their SLE consumption.

Next to the Commonwealth student places, Australian universities (can) offer student places to students who are willing to enter higher education on a full-fee paying basis. This includes students who did not pass the entrance examination standards for the CSP places.

Next to the learning entitlements, students can get help with paying their tuition fees, through the above mentioned HECS system, which makes graduates repay their tuition debt when they are able to do. In addition students can be entitled to loans and/or grants to help pay for living costs while they study.

3.2.1 *What are student learning entitlements?*

Student learning entitlements have been introduced to make students study and complete faster. By reducing the time to degree one could free up some capacity in the system to educate more students. In practice the student learning entitlements scheme comes down to the following structure. Australian citizens and permanent residents and New Zealand citizens who qualify for higher education:

- are entitled to Commonwealth support for seven years equivalent full-time study (Ordinary SLE),
- may be entitled to extra SLE for longer courses and/or postgraduate study once Ordinary SLE has been consumed (Additional SLE). Additional SLE can be awarded if a student is enrolled in an honours course, a graduate entry bachelor degree course, a postgraduate course or when a student had to take additional course units, e.g. when a course is being restructured.
- can accrue Lifelong SLE from the age of 27 (DEST, 2006a). If, on 1 January 2005 a person was aged 20 years or older, he/she would begin accruing life long SLE on 1 January 2012, and every 1 January thereafter. If, on 1 January 2005 a person was aged less than 20 years, the person will begin accruing life long SLE on 1 January of the year in which he or she turns 27, and every 1 January thereafter. The amount of life long SLE a person accrues on the first 1 January accrual date is 1 EFTSL and 0,25 EFTSL on subsequent 1 Januaries.

The ordinary SLEs must be first consumed before one could use the additional or lifelong SLEs. The student learning entitlements system applies to all inhabitants of Australia and New Zealand and holders of a permanent residence permit.

SLEs can only be used for subsidised student places (Commonwealth supported places). Students who were enrolled before 2005 will fall under the previous regulations unless they interrupt their studies and start over again.

3.2.2 *Determining the EFTSL value of a unit of study*

Student learning entitlements (SLE) are calculated in Equivalent Full Time Student Load or EFTSL (DEST, 2004b). An EFTSL value for a unit of study represents the study load for that unit. A study load for a unit of study is expressed as a proportion of the standard study load for one full-time year of the course of study of which the unit forms part, as determined by a higher education provider. The aggregated EFTSL values for units of study undertaken by a full-time student doing a standard study load for one year of a course of study would normally add to 1.0. So a 4-year bachelor programme is a 4.0 EFTSL programme. Students doing more than the standard study load would generate EFTSL values adding to more than 1.0 for the relevant year of study; students doing less than the standard study load would generate EFTSL values adding to less than 1.0 for the relevant year of study.

Normally the higher education provider specifies a standard study load per year of full time study.³ Where a higher education provider does not specify a standard study load, the standard study load for one year of a course of study should be determined by the higher education provider to be the minimum annual study load which, when aggregated with standard study loads for the other years of the course, would enable completion of the course in the standard number of years on a full-time basis.

The EFTSL value of a unit of study is determined by calculating the proportion of standard study load which the unit of study represents of the total standard study load specified by the higher education provider for one year of full-time study in the course of study of which the unit forms part. In calculating the EFTSL value for a unit of study, higher education providers may allocate credit points to units of study offered by higher education providers as a means of identifying the relative value of a unit of study within a course of study.

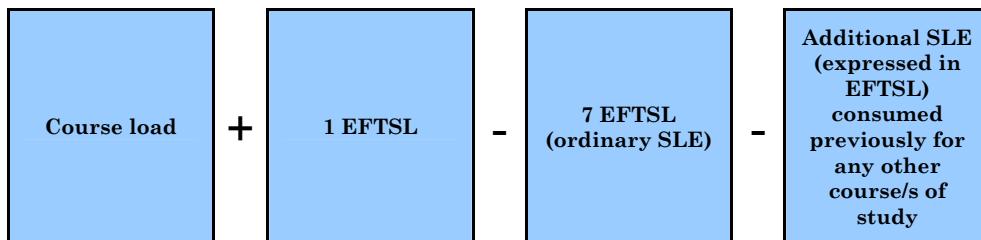
The following example shows how the relative proportion of course units leads to EFTSL values for a particular student. Imagine that Unit A and B are offered on a semester basis and Units C, D and E are offered on an annual basis:

Unit A = 2 Credit points	$2/16 =$	0.125
Unit B = 2 Credit points	$2/16 =$	0.125
Unit C = 4 Credit points	$4/16 =$	0.25
Unit D = 4 Credit points	$4/16 =$	0.25
Unit E = 4 Credit points	$4/16 =$	0.25
TOTAL = 16 Credit points	16	1.0 EFTSL

It should be noted that, in this example, the EFTSL values aggregated for a student undertaking Units A, B, C, D and E (that is, the standard study load prescribed for this year in this course of study) equals 1.0.

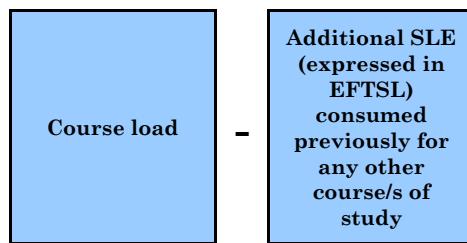
The EFTSL value for a unit of study undertaken at an overseas higher education institution is equal to the EFTSL value which would be assigned to the same or equivalent unit of study if it were undertaken at the higher education provider providing the course of study in which the student is enrolled. If students take part of their courses abroad, the SLEs are awarded to her/his home institution.

The additional SLE (expressed in EFTSL) that a person can get for an undergraduate course of study that has a course load of greater than six EFTSL is calculated as follows:



The additional SLE a student has for an honours course of study, graduate entry bachelor degree course, or postgraduate course (as outlined in paragraph 3.5.5 of these guidelines) is calculated as follows:

³ Higher Education study programmes are subject to a national quality assurance mechanism and institutional accreditation.



3.2.3 *Information provision, registration and control*

Higher education providers must publish the timeframe in which they will consider applications and in which they will notify applicants of their decision, for the re-crediting of the person's SLE. The method of publication is to be determined by the higher education provider. The responsibility for checking the information lies with the higher education providers. They also have to check whether a student has sufficient SLEs left for the number of course units he or she applied to register. In addition must they within 28 days report to the ministry how many SLEs for a particular student must be noted as used. The whole administrative management is being conducted by a new organisation, the Higher Education Information Management System (HEIMS).

3.3 The impact of Student Learning Entitlements

In 2006 it may be too early to determine what the impact of the introduction of the SLE system has on students and the choices they make in terms of their pathways through higher education. Some general comments on the Backing Australia's Future reforms include that extra funds in the system are strictly earmarked and leading to additional bureaucratic burdens. In addition, the extra funds made available for extra student places go to students who are already in the system, but who were not on (fully) subsidised places. Still, many eligible candidates cannot find a study place in university education and Australia is the only OECD country that reduced its public investments in tertiary education over the last decade (ALP, 2007). Australia is one of the most privately paid for higher education systems in the world today. The current government is looking for ways to back out of several of the so-called 'reforms', because no one is clear about the promised improvements of BAF (Dobson, 2006).

Looking more closely at the SLE policy, it is striking that no study was undertaken to see if such a scheme was necessary or even desirable. The reform was mainly driven by a political desire for control (Dobson, 2006). Most of the many millions of dollars involved just are spent on increasing university costs for bureaucratic reasons without more funding going to teaching or research. Most of the reactions to the SLE reform come from the higher education institutions themselves. The major reaction is that the SLE and other BAF reforms lead to additional, repetitive and costly administrative and reporting requirements on universities (Monash University, University Planning and Statistics, 2006). For example, in an independent report commissioned of Phillips KPA by the Australian Vice Chancellors' Committee, the SLE is criticised both for the reporting burden it places on universities and for being ineffective in its stated aim of spreading Commonwealth support for university students more equitably. The report states that the SLE appears to be of little benefit to students, providers, the Government or the public. It is a limitation on previous student entitlements and

delivers no additional funding or other benefits to providers. There is no evidence that it will provide significant savings or obvious policy gains for the Government, and it seems of questionable public interest given the unproductive costs involved in its administration. Entitling students to 7 years of full time studies in itself is absolutely not unreasonable. However, the compliance costs and reporting required from universities to maintain the program feels like “red tape engulfing universities” (Illing, 2006). The whole SLE system has been built on the assumption that universities and the ministry (DEST) can accurately track all students throughout their studies. Universities have to supply the ministry with extremely detailed information, per student, per course, per teaching department and per discipline. They also have to provide revisions file for changes that took place during the year. This puts an enormous administrative burden on universities, departments and the ministry, for hardly any savings made in the whole system (Dobson, 2006). In addition students (and universities) are now also confronted with two streams of information, their higher education contributions and their SLE records (Monash University, University Planning and Statistics, 2006).

An analysis undertaken by the University of Western Australia (UWA) of the total load accumulated at the University of 16,000 students it had enrolled in 2005 indicated only five of that total would have exceeded their SLE, had the SLE limitations been made retrospectively. Given the courses studied by those students, it is also likely that the SLE would have been extended in each case. While it is acknowledged that it was not possible in the UWA analysis to include load undertaken previously at other universities, these figures suggest it is highly unlikely that significant numbers of students will exceed their SLE. Thus there are very serious policy doubts about the value of the SLE. With regard to the administrative consequences it is clear that the SLE system requires DEST and higher education providers to implement and maintain a system of unique national student identifiers, monitor and track each student's consumption of their entitlement across providers and time, and report frequently to ensure that at any point in time the entitlement has not been exceeded. Each provider is also now required to develop and maintain administrative machinery to determine student requests for re-crediting of their SLE where they are unable to complete a unit of study for circumstances beyond their control (AVCC 2006, p.35). The current Education Minister, Julie Bishop, will take such concerns into consideration in a review of the impact on universities of the BAF reforms (Illing, D. 2006).

Regardless of the complaints about the administrative burden, the state Tertiary Admissions Centres, through which students apply for undergraduate courses, already incorporate applicant's SLE information and are developing mechanisms through which to report to universities on any relationships between course applications and SLE weightings. As more recent student data becomes available, issues that will need to be monitored with regard to the impact of the SLE on student patterns of enrolment include: numbers of students, by type of fees, by discipline, by institutions, by types of support taken, by mode of study and how different types of SLEs are spent.

Up to now, some statistical analyses show that over the past years, the numbers of post graduate students have grown quite rapidly, particularly when student loans came available for full-fee paying students (Monash University, University Planning and Statistics, 2006). This is an interesting figure because that may imply that students who exceed their SLEs may not have a serious problem in borrowing to complete their studies and thus not encourage them to study faster.

Altogether, the SLE reform so far did not yet bring the expected benefits of efficiency and a shorter duration of study. The concerns about “the perpetual students” may not have been that strong a problem, or the design of the SLE system has been too generous for students.

4 Colorado

On May 10, 2004 the landscape of public higher education in Colorado was modernized when the College Opportunity Fund program was put into law. By linking state funding directly to individual resident undergraduate students, the Colorado Department of Higher Education is using this approach to improve participation and to create a fairer financial allocation mechanism within higher education. It aims to stimulate the consumer market and attract state citizens into public higher education by becoming clearer on the costs and subsidies in Colorado's public higher education. With this policy change, Colorado is providing a greater level of government transparency to its taxpayers and raising awareness of how tax dollars are spent to provide public higher education. Additionally, the state wants to be transparent about the cost of higher education to potential students and their parents and express the state's willingness to help fund public higher education. As such it hopes to start removing the financial barriers that often prevent students from entering the system.

4.1 Wider policy environment

It is generally regarded that participation in higher education is too low in Colorado (Colorado Commission on Higher Education, 2005). While ranking first nationally in the percent of population over age 25 who have received a baccalaureate degree or higher, Colorado only ranks 27th in the number of high school freshmen who enter higher education within 4 years (US Bureau Sensus, 2003; National Center for Public Policy and Higher Education, 2002). Therefore, the Colorado Commission on Higher Education has taken a multi-year state wide initiative, known as the "College In Colorado" campaign, to dramatically increase the number of Colorado students who are prepared for, enroll in, and graduate from college. This programme involves many stakeholders, like secondary education, parents, higher education, philanthropy, businesses and workforce development. The objectives are clear: to eliminate college access barriers, particularly for underserved students (low-income, minority and males); to ensure Colorado students are academically prepared for, go to and graduate from college; and, to create a better-skilled workforce. Among the major components of College in Colorado are: an entrance examination test which is used as an accountability tool for schools; to provide remediation programs for potential students with deficiencies to prevent dropout later on; assessment of pre-college preparatory programs; upgrade the academic preparation in secondary education; financial support for low-income students to prepare academically; and to provide information about college education to underserved groups of students and their parents in a more structured way.

Colorado's transition to a new funding mechanism has been 20 years in the making. The debate began in 1981 with the release of a policy analysis exploring alternative funding methods for public higher education. While most of these alternatives spanned more traditional fiscal policies, the report also discussed direct student appropriations, through vouchers(Colorado Commission on Higher Education, 1981).

Led by Colorado Governor Bill Owens, Colorado established a new social contract by demystifying college, improving access with a particular emphasis on higher

education/K-12⁴ linkages, strengthening accountability, and improving information to citizens and policy makers.

With regard to higher education itself, the government initiated a 3-tier approach to change the relationship between the government and higher education institutions. These include the tuition stipends (vouchers), fee-for-service contracts, and performance contracts. The tuition stipends means that from 2005-06 onwards, all in-state undergraduate students attending public or participating private colleges or universities – be it a local community college or the flagship campus of the University of Colorado – receive a tuition stipend (voucher) from the College Opportunity Fund. The tuition stipend will be \$2,400 for a full-time student at state institutions and half that amount for a full-time student at a private institution. Part-time students receive a pro-rata stipend. The stipend replaces direct appropriations from the state's General Fund to individual state colleges and universities. The amount of the stipend is set annually as part of the legislative budget process. All resident students going to a public college or university qualify for exactly the same amount, regardless of family income. The stipend is not financial aid. Need-based and merit aid continue to be separately funded programs in Colorado in addition to the stipend amount. The tuition program in Colorado is only for undergraduate students. Stipends do not apply to graduate programs due to the cost disparity among graduate programs.

This brings us to the second reform, namely the introduction of the Fee-for-Service Contracts. In addition to the funding that public institutions will receive from the collection of student stipends, they also have the ability to collect state general fund dollars by entering into a fee-for-service contract with the Colorado Department of Higher Education. These contracts allow the state to purchase "specified educational services and facilities required for the full development of Colorado's educational and economic opportunities"(Colorado General Assembly, 2004). Institutional programs that receive fee-for-service funding may not collect stipend reimbursement from participating students. It is allowed that the state purchases the following programs:

- Graduate school;
- Educational services in rural areas;
- Basic skills courses;
- Economic development services, such as career development and retraining;
- Dual enrolment programs for high school students; and
- Specialized services for professional degrees, such as dentistry, medicine, veterinary medicine, nursing, law, forestry, and engineering (Colorado General Assembly, 2004).

Thirdly, in conjunction with the tuition stipend program, Colorado has created an alternative to traditional state regulation of higher education institutions. Colleges and universities now have the choice: remain under the old, high-regulatory program or sign a performance contract that explicitly spells out how the institution will meet state goals in exchange for the state waiving many regulations. Not surprisingly, every public institution in the state opted for the new performance contract. Performance contracts are negotiated between each institution's governing board and the Colorado Commission on Higher Education. The first round of negotiations, conducted in 2004-05, resulted in four-year performance contracts. Requirements of the performance contracts include access, quality and efficiency, more specifically the following types of targets:

- Require actual percentage goals in each contract for increased graduation and retention of students.

⁴ K-12 is the final year of secondary education.

- Require the institutions to report to the state how they are addressing the issue of recruitment, retention and graduation of underserved students, especially low income, minorities and males.
- Require institutions to make most, if not all, general education core courses guaranteed for transfer to any other two- or four-year public college or university in the state.
- Require that an institution's core curriculum be reviewed by a group of academic professionals to determine course rigor and transferability.
- Require that core curriculum courses which do not meet state standards of rigor and transferability be denoted as such in the institution's course catalog.
- Create a plan for implementing and utilizing a variable pay method for faculty.
- Limit base tuition increases to levels necessary only to cover inflation and increases in mandatory costs (energy, insurance, salaries).
- Allow tuition increases above mandatory costs only when specifically justified, itemized, and tied to access, quality or capital improvement efforts.

In return for the adoption of specified reforms, institutions of higher education are granted greater flexibility and autonomy, particularly in the area of the approval of academic programs, quality control, and much of the capital construction approval process.

4.2 Why tuition stipends?

For Colorado, there were two compelling reasons for adopting a tuition stipend program. The first is the public need to dramatically expand college access for underserved students – minority, low-income and, in many cases, male students. The two biggest barriers to college for underserved students were the lack of adequate K-12 academic preparation and a perceived lack of affordability to attend college by particular groups of students. The financial barrier in many cases is often more a perceived problem than a real one. Low-income parents and students see headlines about double-digit tuition increases and the high cost of going to college which makes them feel they cannot afford college. For example, Dr. L.E. Penley President of the Colorado State University System stated (Penly, 2004) that one should promote access by providing clearer information about the price of college education because parents and students surprisingly often misperceive the price of higher education and the state's role in supporting higher education. Some believe that their tuition pays the entire cost of higher education or even more than that. They do not see the hidden but substantial government contributions. As such, the Opportunity Fund will clarify the contribution of the state as well as the tuition that remains for parents and students to pay" (Penly, 2004).

Research among underserved students and parents revealed that they are completely unaware that state taxpayers subsidize the cost of a college education. When it was explained that they could have a \$2,400 per year stipend, and that the money is set aside for students to use it or lose it, perceptions changed. Simply put, stipends give underserved parents and students a vested interest in their own tax dollars when it comes to paying for college. With the tuition stipend program, taxpayer subsidies to public higher education become much more visible now students and parents understand they are subsidised with \$2,400 per annum. This makes them question how the stipend relates to total tuition costs encouraging a public debate on costs, public subsidies, financial aid and making college affordable for students, even traditionally underserved student populations.

Second, tuition stipends in Colorado create a new type of competition for in-state Colorado students. Before, institutions were subsidized by direct government appropriations based partly on their enrolment, but also on what powerful legislators or special interests were able to squeeze out of the budget for their favourite campus. Under the new system, tuition stipends directly and explicitly fund all undergraduate education on an individual student basis. If an institution can attract in-state students, they receive funding. If one does not, one will lose taxpayer subsidies. This shifts the whole financial focus of colleges and universities. From 2005 onwards, all time and attention spent on lobbying can now be spent on attracting students. It is hoped that this stronger focus on students will increase quality and relevance of education.

4.3 The tuition stipends

In the fall of 2005, Colorado changed its funding system for public higher education to a student-stipend program known as the College Opportunity Fund. Under the new system, the state no longer provides direct lump-sum funding to its public institutions for undergraduate education. Instead, public funds are provided to public and private higher education institutions on behalf of resident undergraduate students in the form of a tuition stipend. Stipends are set annually by the General Assembly during the state's budget process. The allocation is defined on a credit hour basis where the advertised amount is representative of a fulltime student taking 30 credit hours each year. For the 2005-06 academic year, the state provided each participating student with a \$2,400 stipend or \$80 a credit hour. This includes the full public subsidy for the higher education institutions including teaching, research and capital expenditure. Each student receives an account of 145 lifetime credit hours that may be applied toward the cost of total in-state tuition for undergraduate degree programming. Caps do not exist on the number of credit hours that a student may take in any given academic year. Students who are unable to complete a baccalaureate degree within 145 credit hours may apply for a tuition waiver through either their institution or the Colorado Commission on Higher Education who decide whether the student has had exceptional circumstances, like illness. Those students who are not provided a waiver will be required to pay the full cost of instate tuition for the completion of their degree.

Students who receive a baccalaureate degree after July 1, 2005 receive an additional 30 credit hours that can be applied toward continuing education conducted at the undergraduate level. Outside of the credit hour cap, the stipends cannot be used for undergraduate courses that are cash or fee-for-service funded.

Under the College Opportunity Fund, resident students receive a bill for the total cost of instate tuition, which includes both the student's share of tuition and the stipend. While students might initially experience sticker shock by what appears as a substantial hike, in no way does the billing change represent a tuition increase or a decrease in the state's tuition subsidy. What the change does provide is the ability for a student to see the amount of state support that is applied toward public higher education. Additionally, the change allows all students to receive the same financial backing from the state, no matter what institution they attend. That is a big difference with the previous funding structure in which the amount of state support provided per students varied by institution.

4.4 Students Attending Private Institutions

A portion of the College Opportunity Fund program was established to provide Pell-eligible students⁵ attending selected private institutions half a stipend. For participation purposes, these students must have graduated from a Colorado high school and be considered an instate resident. Private institutions that want to participate in the College Opportunity Fund program have to meet seven criteria:

- Enter into a performance contract with the Colorado Department of Higher Education;
- Participate and provide data to the Colorado Department of Higher Education's Student Unit Reporting Data System (SURDS);
- Be a not-for-profit college or university;
- Not be pervasively sectarian;
- Maintain its primary place of business in the State of Colorado;
- Offer general Baccalaureate degrees in the Arts and Sciences; and
- Be regionally accredited by one of the six national accrediting agencies.

4.5 More market orientation in higher education

By replacing the direct appropriation from the legislature to higher education institutions on the basis of tuition stipends and fee-for-contracts, Colorado has introduced market forces into higher education. Even more so, also the performance contracts encourage institutions to focus on enrolling, retaining and graduating their students by providing a quality, relevant education. Under the direct funding model, few such incentives existed.

The Colorado tuition stipends are the first voucher system in US higher education. The stipend replaces traditional direct legislative appropriations to the state's colleges and universities. But stipends, as important as they are, comprise only one part of comprehensive pre-collegiate and higher education reforms in Colorado.

To bring transparency and competition to graduate education funding, Colorado adopted new fee-for-service contracts. Starting in 2005, the legislature now appropriates funding, not directly to the institutions, but to the Colorado Commission on Higher Education. The Commission then negotiates with each public school what graduate programs it will provide and at what cost. It is not an open tendering process in which all institutions put forward their wishes and then the Commission decides who gets how many places. It is more a bilateral negotiation between the individual institutions and the Commission in which also the statutory role and mission statement of each institution plays a role. Private institutions are not eligible for these funds. The Commission has the ability to ask tough questions, such as why does one college produce master's level educated nurses for \$5,000 each while another college requires \$9,500 each for the same level of nursing education? For example, the Commission could choose to purchase more graduate education in nursing from one school over another – based not only on price, but also on quality.

⁵ Pell-grants are the Federal primary grants students receive for tuition and living costs.

4.6 The impact of the tuition stipends

It is too early to see any clear changes in access and student choice patterns which represent an effect of the newly established higher education reforms and the tuition stipends in particular. Nevertheless, some up front investigations have been done, particularly by organising focus groups on the potential impact of the stipend reform. The findings of the panel can be summarised as follows (B. Benson, 2003).

Focus groups of low- and middle-income students and parents taught panel members and commissioners several things. First, high school counselors almost never talk to low-income students about higher education. Second, almost no one understood that the legislature funded two-thirds of every student's tuition. All said that if the state would inform high school freshmen that the state would anyhow pay part of their tuition if they later would like to go to college or university, that would motivate them to stay, graduate and attend college (Benson 2003). This was a convincing reason to accompany the implementation of the College Opportunity Fund with a five-year, \$15 million marketing campaign to publicize public higher education. By using the College Opportunity Fund as the center of its marketing message, the government is promoting the idea that public higher education is affordable and accessible for all Coloradans.

During the focus group interviews conducted by an independent research firm, middle and high school parents and students made the following statements about the College Opportunity Fund program(Sterling Rice, 2002):

- _ "I like that money has been set aside for you and not the schools"
- _ "This show's that they [the state] have a lot of faith in me."
- _ "This is like we're getting our tax money back...it's our money."
- _ "This gives you options...they [the state] want you to do what's best for you."
- _ "Colorado is ready to make an investment in you and your future...they're here to help us."

Two years after its inception, however, there are some general observations that may indicate some preliminary effects of the voucher experiment and the wider higher education reforms:

- To date, there is no concrete proof that the program works. Most of the higher education institutions in Colorado are, however, experiencing a decline in enrollment two years after the programs inception. This may have to do more with the improvement of our economy than anything else.
- Unlike the package-deal like reforms suggested the Fee-for-Service funding is not tied to "performance contracts" of the institutions and is used to balance each institutions appropriation to an amount equal to what they received when the money came directly from the state. This means that the stronger performance orientation does not fully work yet and that the politicized traditional way of funding is still partly in place. But it is not to say that some items in the performance contracts have not moved forward, but in total, the contracts have not.
- The legislative body of Colorado, the General Assembly, has recently talked about doing away with the stipend program, and just leaving Fee-for-Service contracts in place instead as many the program is a failure. Time will tell what will happen.

4.7 Final remarks

One common misconception of the College Opportunity Fund is that the stipend is equivalent to financial aid. However, this is not the case. The College Opportunity Fund is a new way of allocating the funds for higher education institutions. Student aid remains as it was and thus comes in addition to the tuition stipends. The only real new funding is the allocation of stipends to some participants at private institutions.

Important issues for the introduction of the stipend model were the following issues:

- Changing the terminology from voucher to stipend;
- Authorization for the General Assembly to set the amount of the stipend on an annual basis;
- Restriction of the stipend to undergraduate education only;
- Changing the life-time-credit hour limitation from 140 credit hours to 145 credit hours;
- Implementation of performance contracts between institutional systems and the Department of Higher Education;
- Implementation of fee-for-service contracts that would include all graduate level programs instead of the previously recommended Role and Mission grants;
- Inclusion of undergraduate Pell-eligible students attending specified private institutions.

5 Germany

Germany and German higher education is divided into a number of different relatively autonomous states (*Länder*). This means that each state decides on its own funding mechanism for higher education.

Most of German higher education experienced a number of problems. Students take relatively long to complete their 5-year degrees, there are very high drop-out rates, there is a lack of student orientation in the system and the funding mechanisms used to be supply oriented. In the past decades, some general changes can be detected. Though all 16 *Länder* have their own policies, the trends are similar. The steering models changed towards lump sum funding, performance orientation and contract management. All resulted in greater demand orientation, for example visible through tuition fees for specific target groups, decentralised access policies and “money follows student” mechanisms.

The starting point for the voucher discussion in Germany was that changing incentives appeared to work by attracting more students to higher education, dynamic shifts in capacities, and internal subsidisation (Ziegele, 2006). In some *Länder* competition emerged between universities and universities of professional education. Finally, in the new Bachelor-Master model students and their wishes became more important.

Vouchers were regarded as an additional step in solving some traditional problems. First they would better serve the position of part-time students, they would also bring incentive structures within universities (internal allocation), and they would make students more aware of the costs of study and stimulate institutions to more transparency towards their students. In addition, vouchers could be a tool to bridge the borders of the *Länder* and as such address the problems of differences in demographic developments. Funding models should address these type of problems (Konegen-Grenier *et al.*, 2006). The main objectives of voucher models in Germany were to bring more competition and efficiency.

In some *Länder* public formula funding became extremely demand-oriented. For example in Hessen 80 percent of the state budget was distributed according to student numbers and a fixed price for different disciplinary clusters. The fixed price regime came close to the voucher idea (but failed because of an overall increase in student numbers which could not be financed with the given state revenues; constant prices had to be given up). But the most interesting case with respect to the voucher discussion is the *Studienkonten* model that was initiated in Rhineland-Palatine and further developed in Northrhine-Westphalia (NRW). This latter case will be discussed below.

5.1 The NRW *Studienkonten* model

Previously, every student in Northrhine-Westphalia was entitled to free higher education. To guarantee this basic right for students and to keep higher education affordable a system has been developed to reduce the duration of study of students. Since the introduction of the *Studienkonten* model higher education remains free of tuition for every student that completes his/her studies within a limited period of time. However, if one exceeds this duration one has to pay a tuition fee.

Because students are put under time pressure in this system, it is expected that they will make better considered study choices in terms of the institution and field of study. At the same time it is envisaged that the institutions will better care about the quality of their programs as to enable students to complete their programs within the limited timeframe.

5.2 What are *Studienkonten*?

Universities and colleges in NRW use Studienkonten as from the 1st semester (Sommersemester) in the 2004-2005 academic year. This system means that every student receives a number of study credits he/she can use to follow a first study programme or a Master program. Every student's study account starts with 200 credits, calculated as *Semesterwochenstunden* (SWS). Every semester a student follows an education programme at a college or university in NRW will reduce its number of study credits (SWS), called a *Regelabbuchung*. The reduction in SWS will be in accordance with the general rule that a student can use 1,5 times the normative duration of the programme being followed. If a student follows a programme of 4 years (8 semesters) than the total of 200 SWS is divided by $1,5 \times 8 = 12$. That implies that for every enrolled semester a student loses 16,7 SWS of his/her credit account. If one did not complete the programme within that period, then the student will have to pay a tuition fee of €650,- per semester to stay enrolled and to complete the programme. A limited number of exceptions can apply to this rule which makes the student free from paying tuition fees after he lost all his credits.

5.3 Who are entitled to Studienkonten?

The Studienkonten model applies to all public higher education institutions since the summer of 2004. In principle will every student who starts a degree oriented higher education study program receives a study credit account. This applies to both the traditional Magister and Diplom studies and the Bachelor program. For students who after a bachelor degree want to continue in a Masters program there is a separate arrangement. For these students the Total of their bachelor and master program will be taken as a basis for the withdrawal of credits. For example: if a student completed a 3-year bachelor for which per semester $(200 / (6 \times 1,5) =) 22,2$ SWS were withdrawn and the student now wants to follow a 2-year Master program, his SWS withdrawal will be reconsidered now using a total of 5 years as the base unit (10 semesters). The new withdrawal mechanism then will be $200 / (10 \times 1,5) = 13,3$ SWS per semester. This implies that when the student starts a Master programme, instead of a withdrawal of 22,2 only 13,3 SWS will be withdrawn and thus her/his account will be corrected.

As said, a student does not receive a study credit account when one starts a second study program. In practice this means that students do not receive study credits for a second bachelor program, a second master program or a bachelor or master after one completed a traditional Diplom/Magister program. For these students the tuition fee of €650,- per semester applies.

Student who are declared as extremely talented by their secondary school or university can in special cases fall within an arrangement called 'Jungstudierende' which makes them fall outside the Studienkonten model and being free of paying tuition fees.

Students who register for two studies at one institution will get only one credit account and credits will be withdrawn for only one of the two studies, base don the study with the shortest duration.

The Studienkonten model does not apply to PhD education. Students who aim at a doctorate fall outside the arrangement and will be able to study and do research without having to pay tuition fees. For professions that require two studies, like medical specialist, student scan get a second study credit account. Such studies are described in the law.

5.4 Writing off SWS

The writing off of SWS happens every semester with a predetermined number of SWS as described before and base don the nominal duration of studies. Students who already were enrolled in a study program at the time of the introduction of the Studienkonten model also receive a study credits account. This account however was reduced with the number of credits that corresponds with the number of semesters already studied. A student who for example already studied 2 years before the introduction of the new system started with an account of $200 - 4 \times 16,7 = 133,2$ SWS (with a *Regelabbuchung* of 16,7). Also students who started their studies in a different state than Northrhine-Westphalia but want to continue these studies in NRW will see the number of semesters they already studied being withdrawn from their account.

As from 2007 it was planned that the Studienkonten model will get into the second stage and than the standard withdrawal of credits will be replaced by an individual writing off scheme. That means that SWS will be written off only for the specific courses that were followed by each student. From then onwards, students will only hand in SWS for courses they really followed.

5.5 Changing studies

If students change studies within the first 2 semesters of a study than the study account will start fully over again. That means that student scan change studies within 2 semesters without serious consequences. If one changes studies after the first 2 semesters than these will just be written off the account. In principle students can change studies twice without consequences for their study credit budget. The First time during the first semester and a second time during the second semester.

5.6 How do SWS fund the higher education institutions?

Universities and colleges are financed through the Studienkonten model from 2004 onwards. Based on the number of SWS that are allocated to students every faculty is allocated a particular amount of funding. In addition, higher education institutions receive tuition revenues from students who used all their credits. To prevent that institutions who have students with the longest actual duration before completion receive most funding, the tuition revenues are reallocated based on a few performance indicators, like the number of graduates and the average duration of study. This creates a system of performance funding in which institutions with the shortest duration of courses receive most public funds.

5.7 Experiences

About 130.000 students did already take longer to complete their programs than 1,5 times the nominal duration of their courses. As such they already fully used their study credits and had to pay tuition fees from 2004-2005 onwards if they wanted to complete their studies. Of these 130.000 students only 60.000 enrolled in that study year which implies that they either did not want to pay tuition fees because they were enrolled in higher education for other reasons, like entitlements to some social benefits as free health care.

From the beginning, the *Studienkonten* model had two problems. On the one hand the model proved to have high administrative costs, and on the other the model was politically introduced as an alternative to the imposition of tuition fees (Ziegele, 2006). Consequently after a change in government in NRW and a political decision to introduce general tuition fees in NRW at the beginning of the summer term 2007, the Studienkonten model was replaced by a regular funding model again. Almost all Universities and Universities of Professional Education (*Fachhochschulen*) decided to introduce fees at the maximum level of €500 per semester. Regardless of the return to a more traditional funding model in NRW, the political debate on the reforms to a more demand-driven funding model will remain vivid. This will be due to demographic developments which are differing quite a lot between the various German *Länder*. (Konegen-Grenier et al., 2006).

The *Studienkonten* model still exists in Rhineland-Palatine, the state where the model was invented originally.

6 The Netherlands

The discussion on education vouchers or learning entitlements dates back to the late-1980s. Since then, vouchers have been seriously considered as a means of funding higher education in the Netherlands. Major stakeholders in the debate are the Ministry of Economic Affairs and the Ministry of Finance. Because they focus on an efficient spending of public means, they have a strong interest in matters as vouchers and student drawing rights, which are regarded as an effective way of allocating public funds to (higher) education. They argue that vouchers are the most appropriate way to let the money follow the preferences of students. It is expected that, as a result, higher education institutions and schools will attune their teaching services to the demands of students. Plans to introduce a voucher-based funding system have been developed three times in the Netherlands. The first debate took place during the late 1980s, the second during the late 1990s, leading to an experiment and the last one from 2004 onwards.

6.1 The late 1980s debate

During the late 1980s, vouchers became a main topic in the Netherlands, mainly as a result of some dissatisfaction with the public funding mechanism of that time (Ministerie van Onderwijs en Wetenschappen, 1987). A number of problems were raised.

First of all, changes in the structure of higher education, for instance as a result of the large merger operations, required many changes in the general funding rules which made the system very complex and non-transparent. In addition, the funding system was based on the assumption that students complete their education within certain time limits. However, the mechanism did not account for the actual amount of education provided and completed. Furthermore, to combat the long actual duration of studies of many students, the study programs had been shortened in 1982/83 and students lost opportunities for flexible study paths and combining working and learning. A fourth problem concerned the fact that neither students nor institutions had an incentive to complete studies in time and thus students found all kinds of excuses to extend their studies and, related to that, student financial support entitlements. Finally, the funding mechanism only catered for standard students and did not reckon that many students change subjects or institutions after one or two years. All in all, the funding mechanism did not include incentives to adjust educational supply to the demands of students.

The voucher proposals

Based on this criticism, a new allocation model was to stimulate differentiation in higher education in terms of timing, duration, contents of courses and modes of study. Consequently, students would be allowed to choose a greater variety of study paths. However, incentives should also be directed at a completion of initial studies within a limited time frame and to facilitate lifelong learning.

For designing a voucher-like funding model for upper secondary and higher education a working group was installed (Werkgroep Vouchers, 1987). The working group concluded that such a system would be beneficial for the higher education sector

and that it could be implemented as well. The positive results of this working group were even copied into the official central higher education policy plan of 1988 "*Ontwerp HOOP 1988*" (Ministerie van Onderwijs en Wetenschappen, 1987). The major characteristics of the official government proposals for a voucher model included the following (Ministerie van Onderwijs en Wetenschappen, 1988):

- All students would receive 189 study credits, including 168 credits for the nominal duration of courses and 21 credits for additional courses;
- Students in study programs with a long duration would receive additional credits;
- The credits would be valid for a period of 12 years;
- The vouchers were supposed to be valid for initial courses, short courses and post-initial courses;
- If students graduate rapidly, they earn extra credits for post-initial training;
- If students used all their credits or would pass the 12-years validity limit, they could follow higher education at 50% of its costs;
- Finally, institutions would receive the autonomy to set their own fee-levels for post-initial training, with vouchers representing only a limited and fixed amount of money.

Reactions from the field

The central goals of flexibility and opportunities for lifelong learning were received with great enthusiasm by the higher education sector. However, the idea of a voucher-system met with a lot of concerns by various stakeholders, such as higher education institutions, students and the Education Advisory Council. The concerns were particularly directed at the relations between the government, institutions and students. The various stakeholders could not come to an agreement. After years of debate, the voucher proposals were finally turned down in 1991. The cancellation of the whole operation was based on the following arguments:

- The technical and administrative burden of introducing the system was perceived too heavy. Memorising the administrative difficulties of a new system of student support in 1986, the risk of serious additional costs as a result of technical problems loomed large.
- Secondly, it was regarded that vouchers not spent would imply an unpredictable and serious financial burden that could disturb the budgets of both the central government and the higher education institutions in one or another year.
- Finally, the new Minister of Education (since 1990) did not believe that a voucher system would contribute to the new ideas about funding institutions based on outputs.

6.2 The late 1990s debate

During the 1990s the discussion on educational vouchers continued. Several stakeholders, research groups and the Ministries of Finance and Economic Affairs argued that the flexibility of a voucher-like system would very much stimulate the further development of the notion of lifelong learning and market mechanisms in higher education. Also the successive changes in the funding model, making public funding (partly) dependent on the number of new entrants and the number of graduates, could not take away the discomfort of inflexibility. In the funding models that run since the early 1990s, institutions benefit most from traditional students that

get their degree in a short uninterrupted period of time. However, if students interrupt their studies, either for work or other reasons, if they want to combine courses of different higher education institutions, if they change subjects or institutions or if they drop out, then the institutional funding base loses ground. This rigidity resulted in a renewed attempt to stimulate flexibility through the funding of higher education institutions. The Higher Education Policy Plan for 2000 (Ministerie van Onderwijs, Cultuur en Wetenschappen, 1999) proposed a new funding method based on study credits and an even further reaching voucher experiment, both applicable to the sector of the universities for professional education (HBO's). As a result, after more than 10 years of debate, a first attempt in applying vouchers in Dutch higher education was made with a real voucher experiment.

The voucher experiment

The actual experiment started at the 17th of January 2001. It primarily concerns a co-operative effort of 10 institutions for higher professional education (HBO's) and 6 medium and small-scale business organisations (MKB). The experiment includes 1000 students in the final two years of their program. The two major elements of the experiment concern the personal educational plan (POP) and the strong relationship with the business sector (MKB-Nederland / HBO-raad, 2001).

In the personal educational plan (POP), students together with the HBO-institution and an employer determine a tailor-made individual study plan resulting in the final qualifications required to get a degree. Students are given 84 vouchers, representing two years of fulltime study. These vouchers can be traded in for either learning opportunities in a working environment and courses to be taken at the 10 participating HBO-institutions. The flexibility for students in following courses at any of the 10 participating HBO-institutions will increase the competition among these institutions. The vouchers form an additional bonus on the regular funding for the institutions.

The strong link with the medium and small-scale business organisations (MKB) is not only expressed through the opportunity of a dual learning and working structure for participating students, but also by the intermediaries (the so-called "regioregisseurs") installed by the MKB and by the additional vouchers funded by hosting MKB-companies for following specific courses. Through the voucher experiment, the branche-organisations hope to strengthen their relationship with the higher education sector, to combat the problems of a tight labour market and to use the knowledge of students for innovations. As such they offer serious practical periods (jobs) for students wishing to follow a dual learning and working structure.

Reactions from the field and an evaluation

The reactions from the field to the current proposals and experiment are diverse (Ministerie van Onderwijs, Cultuur en Wetenschappen, 2000):

- The HBO-Council was very positive about increasing the emphasis on demand orientation in the funding mechanism. As such, the council is very co-operative in relation to the voucher experiment.
- The student unions had some doubts. They particularly focus on the consequences vouchers may have on the content of study programs. If vouchers are going to be a feature of the Dutch higher education system, the students plea for system wide scheme, including all HBO- and university institutions and courses. However, their major condition for a voucher-like scheme is the transparency of the supply of courses and combinations allowed.

- The umbrella-organisation of private higher education institutions (PAEPON) argued that at least recognised (but not publicly funded) private higher education programs should also be asked to participate in the voucher system.
- The Education Council was a bit more hesitant and preferred to wait until a system of accreditation is being well-developed. Such a system, based on the quality assurance procedures, is currently under construction.
- Finally, though the ministry of education aims at a larger focus on demand driven funding also for the university sector, it seems that a lot of resistance can be expected from the universities to the idea of funding through credit points and vouchers. Since they mutually allow students taking courses at other universities and recognise the study credits, they prefer of a more global funding system based on the number of new entrants and the number of degrees conferred.

In 2004 a final evaluation of the voucher experiment was published (De Weerd en Van der Velde, 2004). A central conclusion, based on interviews with participating students, was that students were enthusiastic about the added value of the voucher experiment as they had become owners of their own educational process, leading to stronger motivation and a better preparation to a dynamic professional market. There was substantial discussion about the question whether institutions should offer a more differentiated and transparent package of course modules from which students could choose. This would not directly imply demand driven education but a more refined supply of education services.

Another issue related to the integration of larger practical components with more intensive cooperation between SME's and higher education institutions.

Both students and teachers did not expect a great impact of vouchers on demand driven education. The problem is that students do not exactly know what they need and what their experiences will be. Higher education institutions see problems to inform students in a simple and transparent way on what students can exactly expect. Education is too much of an experience good, particularly as students do not exactly know in what job they will end up.

The voucher experiment was not regarded as a true experiment because it was relatively easy for students to use their vouchers for relatively large study units. Real demand driven education would require more subtle course offerings to satisfy particular needs. Therefore more emphasis on the personal learning path (POP), the internal course elements needed, course elements one has to get from outside and the assessment of all of these require more attention in a more demand led model.

The experiment showed quite some attention for the POP as the most important element in demand led education. As students follow a more individualised course structure, this may have consequences for their individual assessment, which was/is not fully thought through yet.

Altogether, the experiment did not gain much attention and was not followed up by any further initiative. This could be because it was not regarded as successful, but these types of remarks are not announced.

6.3 The currently envisaged learning entitlements model

More recently the voucher debate was strongly revived. Within the whole debate to make higher education more efficient, to stimulate students to complete a degree within a shorter period and to limit the current problems of administrative abuse of funding principles, the Ministry of Education, Science and Culture proposed a demand driven funding mechanism in 2004, with learning entitlements at the heart of the

model (Ministerie van Onderwijs, Cultuur en Wetenschappen, 2004). As from 2007/08 onwards, it is envisaged that higher education institutions will be funded on the basis of learning entitlements, a sort of vouchers.

The learning entitlements model

The new envisaged model would provide students more flexibility, more freedom of choice and better quality (Ministerie van Onderwijs, Cultuur en Wetenschappen, 2004). The system is based on the idea that individual students will get a limited amount of learning entitlements which they can use to attend higher education institutions for half year periods. For a standard 3-year university bachelor programme this means 8 learning entitlements (the nominal duration of a programme (3 years) plus one additional year). For a 4-year bachelor at a university of professional education one would receive 10 learning entitlements. For a standard 1-year master programme they will receive 4 learning entitlements, thus the nominal duration of 1 year plus 2 additional entitlements. In the period a student uses learning entitlements, they have to pay the nationally determined tuition fee of €1506 per year. If students do not complete the programme within their learning entitlements' period, then the institution can charge them an institutional tuition fee up to €3000 per annum. The whole operation basically comes down to an instrument for the government to limit the right to publicly funded higher education.

The learning entitlement proposal makes part of a broader development towards a new law for higher education and envisaged changes in the student support mechanism. These latter particularly aim at creating additional loan facilities to cover tuition fees.

The learning entitlement system is sold to the public as to allow students greater flexibility and opportunities to determine themselves what programme and parts of different programmes suit best to their own profile. Next to that, a major advantage to the system is the stronger signal to students that attending higher education is an expensive privilege. The limited "educational budget" also urges students to make better and more critical study choices. In addition, it is a step forward in the direction of demand driven funding that better serves the wishes of an increasingly democratising student population (Jongbloed, 2005).

Since the launch of the learning entitlements proposal a heavy debate started. Many stakeholders were involved. Particularly the representative umbrella organisations of the universities and the universities of professional education stressed the heavy administrative impact such a system would have. Some studies on this issues also indicated that learning entitlements would lead to substantial increases in bureaucracy and to difficulties at the higher education institutions (Van Twist en Geleverd, 2006; Capgemini, 2006). This would even become worse if an alternative refined model of study credits would be applied and students would be able to shop around for smaller units of study.

Another argument against the learning entitlement model is that there are doubts about the coherence of study programmes. In theory it would be possible that students for a 3-year bachelor programme would combine 6 different half-year units from 6 different faculties and institutions. Who would have to confer a degree and what would this stand for? Other issues could be related to the information available to students on their opportunities and potential combinations (Jongbloed, 2006).

End 2006, the envisaged system has been postponed with one year because the expected administrative burden for the higher education institutions was regarded to be too heavy to guarantee a smooth introduction of the new system (HOP, 2006). Particularly all changes made to the original idea, including all kinds of exceptional

situations made it difficult for the administrative authority, the *Informatiebeheer Groep* (Ministry of OCW, 2006). With the formation of a new government in 2006/2007 the issue of learning entitlements has regained political attention in parliament and suddenly the plans were partially withdrawn and put aside for a undecided period. When the whole operation will be proceeded is uncertain, if it will at all.

7 Conclusions

Debates on higher education steering and management put increasingly emphasis on demand orientation in the way higher education institutions are funded. This has several reasons, first to give students a greater say in what happens in higher education institutions. If students can vote with their feet (money follows students) than institutions and programmes will take better notice of the (quality) demands of students. Second, if students get a greater say in the organisation and contents of their courses, this may enable them to study more efficiently as well as institutions will try to optimise their own processes. Thirdly, students will also get incentives to make better considered study choices as they would better see the financial consequences of their choices. Finally, it will improve the flexibility of students which is necessary in times when the student population is diversifying as well as the variety of demands from the labour market increases.

The most far-reaching version of demand orientation in education financing is vouchers or learning entitlements. Because the term vouchers gradually received a bad connotation in higher education debates, learning entitlements are more commonly used phrase nowadays. This report shows the debates, advantages, disadvantages and current practices in higher education.

Looking at the practice of vouchers and learning entitlements, a common remark is that in contrast with the strong debates on vouchers it is so disappointing that the number of actual practices and examples was so little in higher education. Recently, this picture is changing. In 2004, Northrhine-Westphalia in Germany started with a voucher like mechanism and as from 2005 onwards, Australia and Colorado (U.S.), use a learning entitlements model to fund public higher education teaching activities. In the Netherland far reaching plans for a funding model based on learning entitlements has been developed, but its introduction has been postponed due to administrative and political reasons.

The initiatives are still relatively new and thus it is difficult to evaluate the precise impact on the behaviour of students and higher education institutions. In all of the four countries, the learning entitlement mechanisms have been introduced to make higher education more flexible and efficient. Students should be given greater freedom to study what they want and where they want. Higher education institutions should become more responsive to student demands and therefore deliver greater quality. In addition, as the learning entitlements budget is limited, students are expected to make better considered choices and to study more efficient. An interesting extra objective of the Colorado initiative is to provide more transparency about the public subsidies going into higher education and therefore to attract more students to attend higher education.

The major preliminary outcomes of these systems do not point at a shortening of the average duration of study yet. It is not clear yet whether learning entitlements attracted more students and whether higher education programmes have become more flexible. The German and Australian experiences show that students not yet changed their choice behaviour substantially. In Australia this may be due to the fact that the learning entitlements budget per student is still very generous which does not stimulate the to study faster. They also do not yet use to opportunities to become more mobile. The Colorado experience shows a decline in student enrolments whereas an

increase was foreseen. This may be due to other reasons, like a stronger economy, but still.

As serious problem in all of the countries with learning entitlements is that they report a serious administrative burden accompanying the introduction of a system of learning entitlements. The bureaucracy and related costs are substantially higher as expected. This may be due to a system in which higher education institutions are required to provide an overly amount of information. Thus the learning entitlements look like being used by governments to strengthen their control over the institutions. The expected administrative burden has also been regarded as a major problem in the Netherlands and because higher education institutions often use different administrative systems, the introduction of the learning entitlements model was postponed with one year.

Altogether, the first experiences with the current learning entitlement systems show that one has to be careful about the administrative burden such a system can bring along. In addition, within a political compromise it may be difficult to design a system that will be flexible for students, but will be tight enough to stimulate students and higher education institutions to reach the objectives of efficiency and greater quality.

Appendix 1: Johnes basic questions on vouchers

Voucher schemes can vary a lot according to a multitude of factors. To classify vouchers systems, a useful start is to imagine answering the following 12 questions:

1. Are schools which are currently independently owned and operated to be included in the scheme as well as those which are, at present, in the state sector?
2. Are schools free to raise or lower the fees which they charge pupils in response to demand?
3. Are additional 'compensatory' vouchers allocated to low income families and/or to otherwise disadvantaged pupils?
4. In the case of secondary and tertiary education, it would be possible to make the value of the voucher allocated to each student vary positively with performance in examinations which serve as entry qualifications; is this done?
5. Are parents allowed to 'top up' the value of the voucher by spending their own money on additional educational services?
6. Does the scheme cover only types of education traditionally provided by the state, or are other forms included too? (Examples include driving instruction or music tuition).
7. Can schools vary their entry requirements? For instance, would some schools be able to restrict demand by raising the grade point average required for entry achieved by potential pupils in their previous schools?
8. Are pupils constrained to spend the whole value of their voucher at one school, or may they spend some at one school and some at another? For instance, a pupil (or her parents) may be dissatisfied with the teaching of mathematics at her school, and may therefore wish to employ tuition (at another school or at home) in that subject, while studying all other subjects at the school; may the voucher be split for use in such circumstances?
9. Is the value of the voucher subject to income tax?
10. Are schools which are included in the scheme required to offer scholarships to pupils from low income families?
11. Are schools allowed to charge higher fees to pupils suffering an educational disadvantage (such as dyslexia or other learning difficulties)?
12. Are schools whose staff are expensive to employ (for example because of their average age) compensated for this by way of a block grant from government which operates separately from the voucher system?

Appendix 2: Tuition bands in Australia

Table A1: HECS discipline bands and maximum student contributions for students on Commonwealth funded places, 2007.

Student contribution band	Maximum student contribution
Band 3: Law, dentistry, medicine, veterinary science	AUD\$8,333
Band 2: Accounting, administration, economics, commerce, mathematics, statistics, computing, built environment, health, engineering, science, surveying, agriculture	AUD\$7,118
Band 1: Humanities, behavioural science, social studies, foreign languages, visual and performing arts	AUD\$4,996
National priorities: Education, nursing	AUD\$3,998

Note: Universities usually set the student HECS fee at the maximum permitted by the Government.

Source: DEST, 2006c

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