# Module 6: The economic case for student support

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**Module title: Costs and economics of student support**

In this module we look at the cost implications of student support. The focus will be on the cost implications from the perspectives of *institutions* rather than that of an individual student, or society as a whole though these will be mentioned. Essentially most of what is said in these main topics is based on the work of Ormond Simpson, a long time 'retentioneer' of the OU and prolific writer on the issue of learner support in distance education and e-learning.

- The first unit will set the scene by going back to the main cost parameters (F, V and N), revisiting both, the 'cube and the formula'.
- The second unit tries to make an economic case *in favor* of retention measures (including supporting students). Beyond the ethical dimension of supporting their students there are opportunity costs of lost income (from fees and grants) and the additional costs of replacing the lost students.
- The third unit looks at drop-out rates as indicators of risks to the student's investment. (In principle institutions should be obliged to publish their drop-out rates since this might help students in their investment decisions.)
- Finally we link back to the Human Capital Theory and try to estimate the loss incurred by society as a whole or governments if many students drop out.

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20 %1 of 5 topics complete
Show data table for This chart displays the number of completed topics versus the total number of topics within module Module 6: The economic case for student support..

## List of Topics and Sub-Modules for Module 6: The economic case for student support

- Module 6 - Readings

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  Actions for 'Module 6 - Readings'

- Module 6 Unit 1: Perraton's paver and the glasshouse of student support

  Discussion Topic

  What is student support? Essentially it is defined as comprising all interactions and resources which assist learners in their studies from point of inquiry through completion and beyond:

  - Teaching and tutoring (course content related support)
  - Advising and counseling (non-content related support)
  - Administrative and technical support"

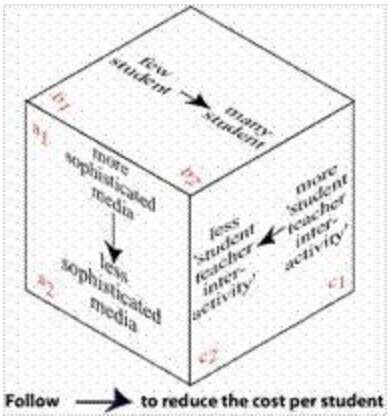
  Initially traditional distance teaching institutions believed that well designed materials in the hand of the motivated student are sufficient as condition of success. However, the high drop-out rate in distance education tended to destroy the argument that distance education has a cost-effectiveness advantage as compared to conventional education.

  Hence, the consequences from this experience were to arrange for a number of measures to help the student to be successful. Partly these measures should help the student by facilitating the whole enrollment procedure which is often fraught with some anxiety on the part of the student. Once the student is in, student support, both academic and non-academic can be seen as nurturing the vulnerable learner to become self-confident and robust in his/her learning environment. We could regard the measures of student support hence as a protective shield, a sort of a glasshouse, protecting the budding novice student from otherwise harsh realities of bureaucratic and other exigencies.

  But the protective shield itself is fragile. Especially, it seems some 'efficiency fanatics' in the planning and finance department may want to use Perraton's ‘efficiency cube’ as a paver to smash the 'glass house of student support':

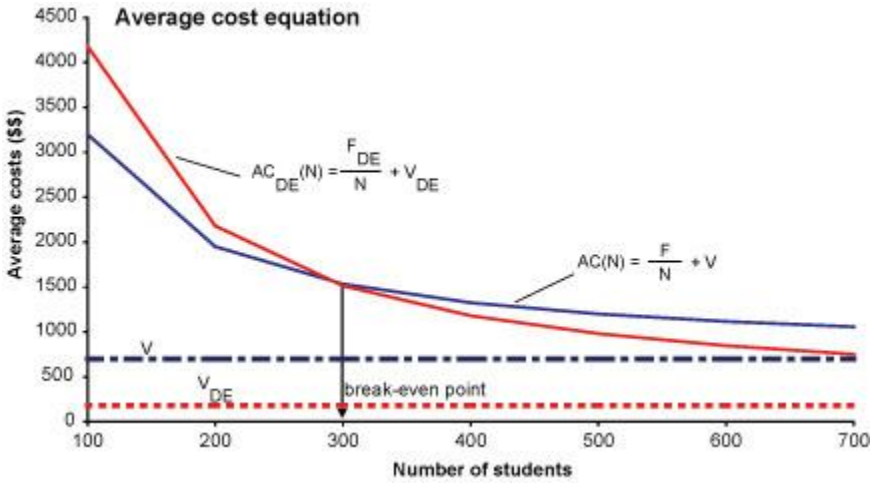
  

Sorry for the metaphor. But student support is fragile in times where efficiency is seen as paramount. That the Perraton costing Cube (directing the planner along the efficiency path) looks like a paver is obvious as you can see:




Recall: 'Perraton's Efficiency Cube' relates to the Average Cost graph (below): The surface 'few students to many students' relates to N; the surface 'more sophisticated media to less sophisticated media' relates to F (since generally media sophistication impinges on fixed costs of development); the surface 'more student-teacher interaction to less student-teacher interaction' relates to V (since student-teacher interaction raises variable cost per student); the arrows indicate the 'efficiency path' leading to lower average costs.

Their argument is clear: Many of the student support measures cannot be automated and require 'real' (in the sense of Holmberg) interaction between persons: be it face-to-face or mediated. Real interaction always claims faculty time, be it the time of the tutor or the counselor or the administrator. True, some of the tasks, especially the administrative ones, can be automated but much of good student support requires the time of the employees of the institution, thus contributing to the *variable costs per student*. But what we learned about V? It is the lower limit, below which *average costs per student* (AC) cannot fall; hence it sets limits even to *economies of scale*. Revisit the Average Cost graph to recall the analogy to realize the conundrum: raising variable cost per student call the efficiency obsessed administrators with 'Perraton's Paver' on hand.




The next unit tries to construct a totally different argument. It tries (metaphorically speaking) picking up the paver and to use it for chasing the enemies of learner support.

**Task:** Look at different measures to support students and classify them in terms of costs. Is it true that they generally tend to drive up V (variable cost per student). Explain why this impacts on cost structure and scale economies.
Which measure of academic student support you can imagine which would not drive up V but be compatible with scale economies or at least scalability of a program?

- Module 6 Unit 2: Drop-outs and cost-effectiveness

  Discussion Topic

  Since the early beginnings of distance education in mainstream higher education in the late sixties and seventies drop-out rates appeared in the cost-effectiveness assessment of distance education. It was widely noticed that while the cost per student comparisons signaled large efficiency gains of distance education the situation often looked less favorable if cost per graduate was adapted as the comparing measure.

  The table illustrates that once completion rates (cost per graduates) rather than cost per students are taken as reference points distance education fares less well even if from purely efficiency-based considerations large drop-out rates could be tolerated before distance education would lose its advantage. The early cost comparison which established the cost-effectiveness of the OU included a model calculation that drop-out rates of the OU could be as large as 89% before it would lose its cost-efficiency advantage.

  However, the above table shows terrible completion rates for a number of distance teaching institutions which led to very critical assessment of distance education as such:

  "Distance education systems, from a political economy perspective have thus usually been seen as giving a second class, inferior education to those allowed into education last, namely those who are hardest to reach and frequently the most disadvantaged. To add insult to injury, cost-recovery efforts have usually been higher in distance education system, so disadvantaged students have ended up paying more for their education than those in conventional schools. (Oliveira 1988, Nettelton 1991). Moreover, the independent nature of distance education lets fewer students through the education pipeline. Those who do not get through are often "cooled out" from higher expectation and society is absolved of blame for not having given them a fair chance. Indeed, more broadly, distance education systems have been seen to help maintain the stability of unfair societies by legitimating what is only a pretense of equal opportunity. More directly, especially for authoritarian systems, stability can be enhanced because, with distance education, students do not congregate and are therefore less likely to be a political force." (Klees, 1995, p. 403)

  If you look as drop-out rates as signaling the students' risk of their investment in education it seems that even of studying at the OU comes with high risks:

"But taking the UKOU as an example for the overall retention from start to finish over a degree course is of the order of 45% or less (UKOU IET 2004) This compares with an average retention rate in conventional UK higher education of around 80%. Thus students 'investing' in distance education in the UK have more than twice the risk of losing his or her money as a student investing in conventional education. In fact for some students the risk attached to investing in distance education may be worse than the risk of investing in a wildcat drilling venture (Montie, 1999)." (Simpson, 2005, p.3)

Both quotes suggest that there is an ethical and a financial dimension in ignoring the exigencies of student support: we sell fraudulent products (as it was widespread practice in the financial services industries) and break the back of student s' self-confidence ('cooling out their aspirations' and making them internalize their sense of failure).

The relation is modeled in Exercise A14. (The cost-effectiveness of distance education institutions in the Module 3 Unit 2: Efficiency and cost-effectiveness ratio).

***Activity A14:***
***The effects of drop-outs***

*In this activity you can see what can happen when you try to increase efficiency by lowering student support. While you may improve efficiency (cost per student) you may decrease your cost-effectiveness (measured as cost per graduate).*
*1. Use the spreadsheet Activity A14 for this.*
*2. To lower student support, enter a figure in cell F11. e.g. to lower student support by 10%, enter 0.01.*
Click here

This spreadsheet is constructed in such a way that with a reduction in student support costs or media sophistication, a raise in drop-out is coupled. You can try 'to go the efficiency path' as indicated on 'Perraton's Paver' and you will see that all your alleged efficiency gains will not lead to improved cost-effectiveness: this is because whatever you fail to do in support has an impact on completion. Albeit this is little more than a model it nevertheless alerts you NOT to follow the efficiency path too relentlessly. Especially the less the adult learners constitute a captive market for distance teaching institutions the more students have a choice and will move where their survival rates are higher.

**Question:** Do you consider drop-out rates as measuring the risk of students to graduate? Can this be considered as a risk attached to the student's investment in education? Should therefore drop-out rates be made public? Could that have a collateral damage in terms of 'grade-creep'?

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**References:**

-- Klees, S. J. (1995). The economics of educational technology. In M. Carnoy (Ed.), *International Encyclopedia of Economics of Education* (pp. 398-406). Oxford: Pergamon.

-- Simpson, O. (2005, 20-23 June). E-learning and the future of distance education in the markets of the 21st century. In A. Szücs, Bo, I. (Ed.), *Lifelong e-learning proceedings: Bringing e-learning close to lifelong learning and working life: a new period and uptake. Paper presented at the*. Helsinki University of Technology/Finland.: EDEN 2005 Annual Conference.

- Module 6 Unit 3: The economic case for retention

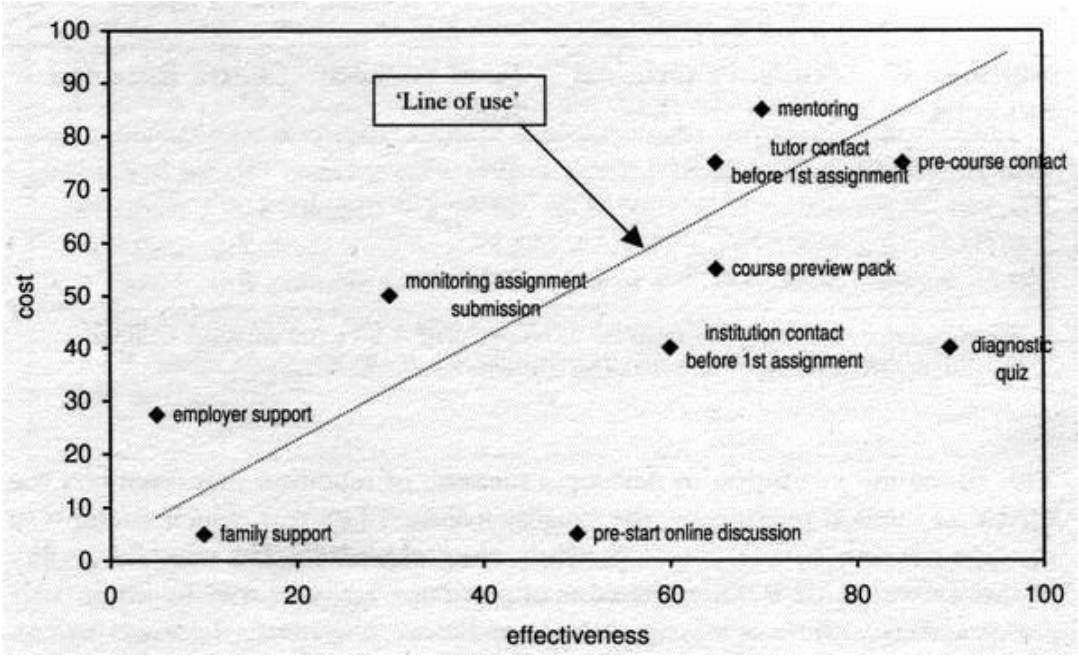
  Discussion Topic

  In the previous discussion units we have seen that the claim for distance education for being the more cost-effective solution is to some extent impaired by high drop-out rates. This main topic cites two cases from Ormand Simpson suggesting how 'Perraton's Paver' could possibly be used to defend the case of the retentioneers:

  *Retention fee income (Simpson, 2003 p. 136):*
  In most institutions you have modalities of returning part of the students fees if a student drops out (generally on a sliding scale: the later the student drops out the less, if at all, he will be re-imbursed). This means the institution looses money if students drop out.

  *Scenario:* Let the course fee be $100 of which the institution has to pay $80 upfront before the student starts. Let the number of students be 1000. A dropout rate of 40% would then mean that 1000*40% = 400 students will drop out. If we put a retention strategy in place let us assume that the dropout rate drops to 30%. This means 1000*30% = 300 students drop out; 100 less than before.
  Assume that the institution repays the students dropping out 50% of their fees back (assuming they drop out after 3 weeks). Then we may have a cost of lost income (due to drop out) of 400*$50= $20000 before the retention measure, and a cost of lost income of 300*$50=$15000. This means we have reduced the cost of lost income by $20000-$15000 = $5000. However, the 100 (400-300=100) retained students will also make the institution to incur further costs: the costs not upfront invested, i.e. $20 per student.
  Therefore the net gain of retention is : $5000 – ($20*100) = $3000.
  In this scenario the 'ROI in retention' (ROI = Return of Investment) is positive as long as the retention measure costs less than $3000/100 students = $30/student.

  Simpson insists that there are low cost retention measures:




A further example demonstrates that the economic case for student support should include - besides the opportunity costs of lost income - the additional costs of finding replacement (since the cost-efficiency of the institution depends on keeping at least the steady state of enrollment level).

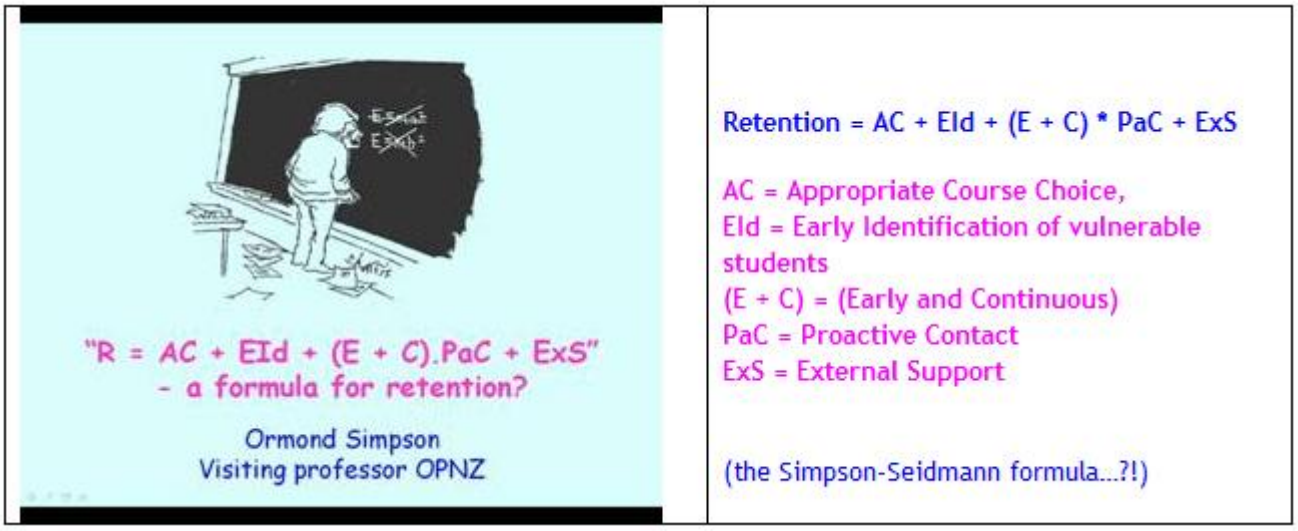
*Costs and benefits of retention – a case study of the UKOU (Simpson, 2003, p. 139):*
Essentially the income of the UKOU derives from fees and grants. Retention related expenditure is incurred by supporting students and by recruting new students. Simpson assumes that the cost of supporting students and the fees are equal (by and large). Under this assumption it holds:
Cost of 1 student dropping out = lost grand + cost of recruiting 1 new student
A typical one year humanities leads to a grant of $1700
The average recruitment costs are $300
Hence: cost of 1 student dropping out = $1700 + $300 = $2000

*Scenario I:* We apply a retention measure to 3000 students increasing retention by 3%. This means we can keep 3000*3% = 90 additional students. We further assume that the retention measure costs $8/student. This means a total cost of 3000*$8 = $2400. Given that we have retained by the measure 90 students the cost per retained student is: $2400/90 = $270 (approximately: exactly $266.6..). Hence retaining a student means a benefit of $2000 and a cost of $270, the net benefit of retaining a student is $1730.

*Senario II:* If we generalize scenario I by rolling out our retension measure to say all the 18000 new students we can assume a net benefit of $934200 = (3%*18000*$1730). Since the cost of the measure is $8*18000=$144000, the retention ROI = $934200/$144000 = 648.75%

These small examples demonstrate that a solid case can be built up in favor of student support measures using economic reasoning.

Based on his experience Ormond has developed a 'Retention formula' which I find quite convincing. It is further explained in the attached document.




**Question:** Do you find the argument, that recruiting a new student is more costly than keeping an already enrolled one, convincing? Why is the drop-out rate still so high in distance teaching institutions?
What would you consider the most important learner support measures in the MDE?_____

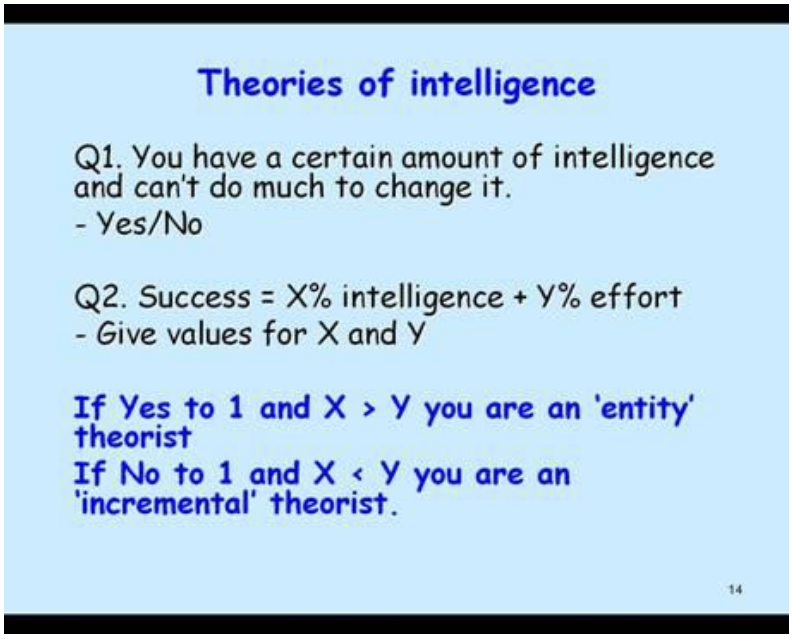
**Reference:**
-- Simpson, O. (2003). *Student retention in online, open and distance learning*. London, Sterling, VA: Kogan Page.

- Module 6 Unit 4: The wider context

Discussion Topic

We are more concerned with the question to which extent you can build an economic argument for pro-active retention measures. But Ormond's discussion shows how institutional policies on learner support relate to ethical stances and accepted believes about the nature of intelligence. A wide-spread culture of treating intelligence as an entity sees investing in student support as a waste of money. How widespread and influential such a theory can be shows the following quote:

"They [secondary school teachers' association, conservative parties organized industry and commerce in Germany in 1959] maintained that only about 3 to 5 per cent of the population are gifted enough to benefit from higher education." (Philips, 1995, p. 18)




Find additional papers by Ormond Simpson attached to get a picture on learner support beyond the narrow economic focus in this course.

**Question:** Many employers use educational credentials as sorting tools. Many also believe in the 'Bell Curve', a 'Normal Distribution' of talents and intelligence in the population. If the expansion of HE goes beyond 50% which may educational credentials as sorting devices lose their attraction for employers?

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**References:**

-- Simpson, O. (2008). *Do we need a new theory of learner support?*
-- Simpson, O. (2006, June ). Predicting student support in open and dist6ance learning. *Open Learning, 21*(2), 125-138.
-- Phillips, D. (Ed.). (1995). *Education in Germany: Tradition and reform in historical context*. London, New York: Routledge.