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AGAINST RECESSION**

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CROATIAN QUALITY MANAGERS SOCIETY

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QUALITY AGAINST RECESSION

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QUALITY CONCEPTIONS OF LEARNING

KVALITETA KONCEPCIJA UČENJA

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ABSTRACT

Oxford and Cambridge remain among the best universities of the world (according to the information of the Times Higher Education). What is the Oxbridge recipe for success? Can it be copied for use elsewhere? The answer is not only in the historical experience, but in the model, the technologies and conceptions. Will it continue to ensure perfectly baked and employable undergraduates emerging from the academic oven, and continue to provide solid scholarship and fruitful research? One of the core principles of education in these universities is tutorial system. It helps higher education courses foster the development of students' intellectual and imaginative powers; their understanding and judgement; their problem-solving skills; their ability to communicate; their ability to see relationships within what they have learned and to perceive their field of study in a broader perspective.

Key words: education, quality, tutorials, conceptions of learning.

1. INTRODUCTION

Many academics who would agree about little else - do seem to agree about what comprises higher learning. Higher learning demands that students

do more than learn to reproduce information. Instead they are called upon to master, transform and create knowledge. Early in the twentieth century A. N. Whitehead wrote an influential essay in which he argued that: "The University imparts information, but it imparts it imaginatively... This atmosphere of excitement, arising from imaginative consideration, transforms knowledge. A fact is no longer a bare fact: it is invested with all its possibilities. It is no longer a burden on the memory: it is energising as the poet of our dreams, and as the architect of our purposes."

2. THE MODEL

Let's consider Oxford in terms of an inputs-processes-outputs performance indicator (PI) model.

Table 1. Oxford in terms of an inputs-processes-outputs performance indicator (PI) model.

INPUTS	PROCESSES	OUTPUTS
students (academic achievement/ potential <i>and</i> social capital)	the tutorial	employable graduates
+ staff	+ 'peer pressure'	+ research
+ infrastructure (including the concept of the collegiate university)	+ 'collegiality'	+ 'a wider social role'
+ money (extra taxpayer funding plus endowment income)		

Source: Made by authors.

We can take each ingredient of the recipe (the four inputs), then consider the results (the three outputs), and finally explore the management theory of what happens (the three processes) inside Oxford's listed building, stone-faced, oak-beamed black box as the truly mysterious part of any set of performance indicators! The detailed data supporting the assertions made summarizing the statistics of inputs/outputs are to be found in the comparative information on UK HEIs published by the Higher Education Funding Councils (HEFCs), Higher Education Statistics Agency (HESA) and CVC.

There is a lot of information about "inputs" in the process of Oxford and Cambridge education performance. We can just notice that students, staff pass through rigour recruit, and infrastructure and money, however, is clearly the key differential as advantageous input compared with other universities.

Employable graduates is Oxbridge's key output, whatever academics may feel about the value of their research activity, in terms of need for the University to serve society and the economy. A *wider social role*' is an emotive issue to discuss in a supposedly egalitarian society, but if higher education (like Premier League football or Olympic-level sport) is necessarily elitist then Oxford (together with a handful of other UK elite HEIs) has the job of taking the best students (*carefully and fairly selected*) and coaching them (*in a very demanding and intensive way*) using academic staff who are themselves the best available. It is still, and always has been, a nursery for the nation's leaders, in most if not all walks of life; a finishing school for proto-leaders. It would fail the talent sent to it, and in turn the nation, if it were staffed by second-rate academics on third-rate salaries, and failed to demand of those talented students less than total commitment and prolonged hard work in order to earn the Oxford degree, which, clearly, must never be 'dumbed-down'. Fine words: but sustainable concepts? And anyway, how readily does a robust commitment to academic rigour fit with the government's agenda on 'social inclusion'?

3. PROCESS

The tutorial is the key feature of this demanding and intensive learning experience vital to the proper use of that talent. Occasionally it does not work: academically sub-standard tutors, weak tutors, lazy tutors, boring tutors not prepared to or able to demand a vigorous pace from their tutees; or lazy students, dim students, alcoholic and 'substance abusing' students, not able to keep pace. It certainly does not work if the academics lose interest in teaching 'the young', or if they retreat to the research closet, or if they lack the intellectual nerve and agility to teach across a reasonably broad range of the degree discipline's spectrum and instead have the confidence and desire to teach only their increasingly.

The pressure is an important element within the process, both in terms of motivating academics but also in respect of students maintaining "*internal*" standards.

3.1. Conceptions of learning

Adult learners conceive of learning in six significantly different ways, as set out below. These different ways operate as a 'nested hierarchy'. This means that someone who holds conception 6 may also express conception 1 in appropriate contexts, but that someone who holds conception 1 will not ex-

press, and may not understand, conception 6.

- Conception 1: Increasing the quantity of information of which the individual is aware;
- Conception 2: Memorising;
- Conception 3: The acquisition of facts, methods, and techniques which can be retained and used when necessary;
- Conception 4: The abstraction of meaning;
- Conception 5: An interpretative process aimed at understanding reality;
- Conception 6: Learning as about changing as a person.

The first three conceptions of learning correlate with surface approaches to study. Students who believe that learning is about the absorption of facts, is about memorisation, or is about mastering techniques, will tend to adopt a surface approach to study. The latter three conceptions of learning correlate with deep approaches to study. Students who believe that learning is about the creation of new structures of meaning, or about developing ways of interpreting reality, or about changing as a person, will be more likely to adopt a deep approach.

So what happens when students holding these different conceptions of learning encounter **the tutorial system**? The research suggests that they will treat tutorials in a way that is consistent with their current conception of learning. If a student thinks that learning is the mastery of techniques, he or she will think that the purpose of a tutorial is to teach techniques. If a student thinks that learning is an interpretative process aimed at understanding reality, he or she will treat tutorials as a place in which to explore different frameworks for understanding reality. The astute reader will have noticed that there is some considerable scope for confusion here. "We would expect tutors to hold the higher conceptions of learning."

3.2. What can tutorials achieve?

Although they may start out with different conceptions of learning, tutors and students do not pass each other like proverbial ships in the night. One of the great strengths of the tutorial system is that it enables tutors and students to engage in a dialogue that demands more sophisticated levels of understanding, and suggests new conceptions of learning. Tutorial teaching encourages students to make the discovery that higher learning is different from, and demands more of them, than learning as they may previously have conceived of it.

It is something of this sort, perhaps, that W.G. Moore had in mind when he wrote of the two worlds that lay within the expressions, "Mr. Moore is being taught by Dr. X." and "Mr. Moore is reading this part of his subject with Dr. X." 'Being taught by Dr. X' suggests a world in which students and their learning are the objects of other people's - that is tutors' - endeavors. On the other hand, a student 'reading this part of her subject with Dr. X.' is engaged in a working partnership in which her own endeavors lie at the heart of her learning and are really of far greater significance than the efforts of her tutors.

4. CONCLUSION

Not only does this latter view of things more closely accord with the world of the tutorial as the Oxford tutor sees it, but it more closely accords with the working week as the Oxford student will experience it. For each tutorial hour spent working with a tutor, a student will probably have worked at least another nineteen hours alone. (Some students will have worked many more hours than this, and others undoubtedly less, but, whatever the actual figure, the tutorial hour represents only a very small part of the time that students spend learning.) The tutorial's importance, then, lies in what it *prompts students to do when they are working alone*, as much as in what happens when students and tutors are working together.

To pursue our shipping metaphor, the tutorial is not the journey itself. It is the means by which students may chart their course. So, although tutorials may occupy only a small part of students' time, as guides to the navigation of deep waters they are not unimportant.

Sažetak:

KVALITETA KONCEPCIJA UČENJA

Oxford i Cambridge ostaju među najboljim sveučilištima na svijetu (prema podacima koje daje Times Higher Education). Koji je Oxbridge recept za uspjeh? Mogu li ga i drugi kopirati. Odgovor nije samo u tradiciji i iskustvu, nego i u modelu, tehnologiji i konceptu. Hoće li oni nastaviti izvoditi savršene studente koji izlaze iz njihovog okvira i koji se lako zapošljavaju nakon što diplomiraju te nastaviti davati pristojne stipendije i uspješno provoditi istraživanja? Jedno od temeljnih načela obrazovanja na tim sveučilištima je sustav starateljstva (mentorstva). On pomaže razvoju studenata tijekom procesa visokog obrazovanja, intelektualne i inovativne snage, njihova razumijevanja i prosudbe, vještina rješavanja problema, sposobnosti komunikacije, mogućnosti uočavanja veza unutar onoga što uče i razumijevanja predmeta studija u odnosu na okruženje.

Ključne riječi: obrazovanje, kvaliteta, lekcije, koncepti učenja.

5. LITERATURE

1. Palfreyman, D., *The Oxford Tutorial*, second edition, OxCHEPS, 2008.
2. Palfreyman & Tapper, *Structuring Mass Higher Education: The Role of Elite Institutions*, Routledge, 2009.
3. Tapper & Palfreyman, *The Collegiate Tradition in Higher Education*, Springer 2010.
4. *Oxford Tutorial*, Suzanne Shale, The Oxford Tutorial in the Context of Theory on Student Learning, second edition, Oxford Centre for Higher Education Policy Studies, New College, Oxford, 2008.