



Dr Terence Clifford-Amos, MA, MEd,
LRAM, LTCL, PhD International Consultant/Université
Catholique de Lille/EC Expert - [terence.clifford-
amos@magdalene.cantab.net](mailto:terence.clifford-amos@magdalene.cantab.net)





Points from yesterday:

Affordability of Higher Education;

Making vocational education more attractive;

Relationship between qualifications and Employability;

Superfluity of questions and a difficulty in finding suitable conclusions;

First day of the future.

Oxbridge Teaching and Learning Ivory Tower?

- Academic Supervision – 1 to 1 teaching
- Curricular and ECTS
- Assessment – mostly summative
- Pace – high velocity
- Linear Learning A –Z speedily
- Memory – highly retentive minds
- Skills?
- The Summative Process – Judgement Day

Time, Education and Reflexivity

Two year programmes

- Reflection by its very nature is ongoing and takes time.

‘Give the students something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results’.

— [John Dewey](#)

Reflection cont...

‘The self is not something ready-made, but something in continuous formation through choice of action’.

— [John Dewey](#)

Critical reflection involves a critique of the presuppositions on which our beliefs have been built. Learning may be defined as ‘the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation and action’ - Jack Mezirow (1990)

How Critical Reflection Triggers Transformative Learning.

A Life of Action or a Life of Contemplation?

- An academic education is the most appropriate form of education whether the student aspires to a life of Action or one of Contemplation.
- R Hutchins *The Higher Learning in America* 1936

Is Academia a place where skills (whatever they may be) can be learnt and mastered?

Investment in Technical Education (UK 2017)

- The government intends to work with employers and colleges to design new sector-specific pathways, from construction to creative-based design professions, so that young people leave college with the skills, knowledge and expertise that employers want.
- The UK's technical education system is weak by international standards. Only 10 per cent of 20 to 45-year-olds hold technical education as their highest qualification, placing the UK 16th out of 20 OECD countries.
- A transformation in technical education will be revealed in yesterday's budget, backed up by £500m a year investment, and an aim to create 15 new "world class routes" of "equal value" to A Levels to prepare school and college leavers for the changing job market. [Independent Newspaper March 2017]

Whitehead's Competence/Style Philosophy – SCHE competences

“It is an aesthetic sense based on admiration for the direct attainment of a foreseen end, simply and without waste... Style, in its finest sense, is the last acquirement of the educated mind; it is also the most useful. It pervades the whole being. The administrator with a sense for style hates waste; the engineer with a sense for style economises his material; the artisan with a sense for style prefers good work. Style is the ultimate morality of mind” (A. N. Whitehead, 1932)

Reflection

“Learning is but an adjunct to ourself
And where we are our learning likewise is”

Shakespeare (*Love's Labour's Lost*)

Wishing to be Something else:

- Schools wishing to become Colleges
- Colleges wishing to become University Colleges or Universities
- Some Technical Universities wishing to share in the higher status of academia
- Colleges with some Level 5 and 6 provision aiming for 7 and 8 and ultimately degree awarding powers
- Colleges with some level 5 and 6 provision wishing to take on research and staff with research experience.
- Where does this leave technical and vocational education?

The meaning of Level 5...

- To provide students with vocational academic options and pathways
- To provide higher education within a shorter time frame
- To Emphasis skills and competences which are more practically orientated
- **To provide for the needs of employers??**
- To provide life skills, often multi-dimensional
- To provide a more practical approach to life-long-learning
- To set realistic and targeted employment skills
- To begin the process of vocational specialisation

The needs of Employers - my travels

- Quick immersion
- Autonomy - unsupervised working
- Able to get on with older workers (mentors)
- Good numeracy/literacy
- Flexibility - in shifting to different tasks
- Ability to apply practice from theory speedily
- Good social mixer
- Loyalty
- At best - teach the company something new

Employers - my travels levels 5 and 6

- Engage in curriculum development
- Hold seminars with lecturing staff
- Sit on thesis (extended essay) panels
- Engage in round tables with students
- Provide internships
- Engage in fund raising activities
- Some employers are also part-time staff members
- Act as visiting lecturers
- **Members of Accreditation Panels**

Why should Technical Education be a poor relation? Is it a poor relation at all today?

- ‘Our concept of liberal arts education must address the fact that, unlike those Athenian citizens, we are being educated for a world in which we are citizens, but also paid workers and home-keepers. In other terms, it (liberal arts education) must incorporate both instrumental and consummatory knowing’.

This is to say that we should be educated to think and to do.

Lisa Heldke [2005]





Level 5: the Missing Link EC/ EURASHE 2010

- SCHE – level 5 studies (associate degree level) are definitely gaining ground in Europe compared to the situation in 2003. At the moment 19 of the European countries (or regions) studied do have SCHE – level 5. A few of those countries have just started up SCHE – level 5 studies and others intend to do so in the near future. 1,694,080 students at least are studying in SCHE-programmes. Especially non-traditional and mature students are increasingly participating in SCHE.
- SCHE can be considered to be the missing link between secondary and higher education. The fact that the Bologna process has led to the introduction of the Qualifications Framework for the EHEA (including, within national contexts, the possibility of intermediate qualifications) has definitely enhanced the status of SCHE. SCHE enables students to climb the ladder of higher education step by step (??)

Level 5: the missing link: EC/EURASHE 2010 cont...

- In all countries SCHE level 5 HE has a very strong focus on cooperation with industry and other economic and social partners. In some cases cooperation with companies is compulsory. The key argument to do so is the need to have more highly educated and trained technicians that are required by industry and who respond to the explicit needs of industry.
- The fact that SCHE focuses on immediate and concrete employment results in industry being closely involved in outlining the contents of level 5 SCHE studies. It also results in the fact that SCHE-courses put considerable emphasis on employability in various ways. This study also reveals that students are employed at their level as highly skilled technicians in various kinds of jobs and that most of them find employment fairly easily not long after graduating.

Foundation Degrees – UK Short-Cycle

- Formal qualifications are not always necessary – commercial or industrial experience might be more relevant.
- In some instances, the accrediting of existing company training received while having foundation degree status may be possible. Generally this is investigated on an individual company basis.
- Foundation degrees combine academic and workplace skills
- Time duration is two years for full-time students

The Times, they are a changin Bob Dylan

- Eye Controlled Technology
- Paper Diagnostics
- Designer Antibiotics
- Ingestible Robots
- Smart clothing – nanoporous fabrics, miniaturised electronics and haptic feedback
- Volcanic mining – minerals from active submarine volcanoes
- Carbon-breathing batteries

Getting a base in the future

- Super Antivirals
- Diamond Batteries – nuclear batteries converting nuclear radioactive waste into electricity
- Optogenetics
- Unhackable Quantum Internet
- Cheap Solar Power
- Biomimetic materials
- 3D Printing in every home
- Germ-line genetic modification – designer babies
- By 2055, wave top (floating) and undersea cities

Thomas Aquinas 1225-1274

Philosophical Trichotomy

Wholeness, Harmony and Radiance

3 requisites for the achievement of Beauty











Slovenia

In forest night the stars do tell,
Tall tales of a nation's crystal bell.
It rings clear in the mists of Slovenian time,
And spurs the blood of hearts sublime.

Where mountains rise tall and stately,
And streams flow through veins aplenty,
Keep the Medved in your care,
So greatly the finest universal bear.

A
n
d
s
o
t
h
e
c
h
a
p
e
b
e
l
s
o
f
B
l
e
d
r

And so the chapel bells of Bled ring out,
Piercing the peaks' primordial shout.
Where peace trims a nation's wars,
So let it be for my own footsteps' chores.

A new Prešeren I want to be,
To sing of Soča and Boka free.
So spin me language for my quill,
In love's syntax, overspill.

Then gently chime me among all so blest,
And there lay me to my final rest.

Terence Clifford-Amos 2010

THANK YOU

It has been wonderful sharing time

Terence/Terry