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New culture at university from input to output orientation

Dong Liang^{1*} Johann Günther²

¹Manufacturing Industry Development Research Center on Wuhan City, Wuhan, Hubei, 430056 (CHINA)

Business school of Jiangnan University, Wuhan, Hubei, 430056 (CHINA)

²Jiangnan University, Wuhan, Hubei, (CHINA)

Saint Petersburg State University for Telecommunications,
Saint Petersburg, (RUSSIA)

Visiting Professor at Danube University Krems, (AUSTRIA)

E-mail : johann@johannguenther.at; sxyld@163.com

ABSTRACT

University systems all over the world are in a change process. The process from input-orientation to output-orientation was ongoing in business and industry. Institutions of higher education can learn from economy.

KEYWORDS

Input orientation; Output orientation; Trends in education; Media technology; Employability.



GENERAL TRENDS IN EDUCATION

In recent decades, our world has become a global village. People's behaviour is becoming similar. The economy sets standards that are the same the world over.

The same trend has now reached the system of education. In this age of liberalism, business and economic thinking rule. Education ministers have coined the term 'employability' and want young people to be educated in such a way that they can be employed in the business world directly and without much additional on-the-job training. Universities have ceased to be the great free institutes of thought. They have been deprived of their freedom and are now measured on the basis of their output. Their graduates have to be quickly employable in the job market. The Austrian Labour Market Service (AMS) publishes statistics which specifically show the unemployment rate of graduates of individual higher education institutions. A ranking list of employability has been created. From the point of view of politicians, not the knowledge taught or the final results achieved is crucial, but instead the young people's level of employability.

Accordingly, efforts are being made to achieve a globally uniform system of tertiary education. The European Union is switching to the Anglo-American system with its 3 stages:

- Baccalaureate
- Master
- PhD.

Study periods too, are being equalised to match the formula of '3 – 2 – 3':

3 years' Baccalaureate

2 years' Master

3 years' Doctorate (PhD).

The switch to the 3-tier system produces a first layer which has so far not existed in Europe. Educational institutes which have not hitherto been called academic have now become 'undergraduate'. Therefore, military academies, pedagogical academies, health and social academies become higher education institutions and offer programmes at Baccalaureate level and above. This leads to an additional number of graduates with a degree from a higher educational institution,

PRIVATION AND LIBERALISATION

Due to changing conditions public subsidies are being redefined. This new situation has been brought about by

- the change in the world economy,
- globalisation,
- European Union,
- increased affluence,
- demographic changes and
- budget cuts by the national government.

Because globalisation is fast progressing, an individual nation state can no longer intervene and regulate by itself. It is inevitable for the countries of the European Union to act together. Political-economic competency has been transferred from the state to the EU.

While a free market economy has been created by law in the tertiary sector of education, in reality the individual areas are judged by different standards and an influence is exerted on the free rules of the market.

State universities are 'autonomous' on the one hand, but on the other hand target agreements between Ministry and university managers determine the academic fields and their scope.

Universities of applied sciences are run as private business enterprises and at the same time subsidised to the tune of a pre-defined number of students per programme. The institution receives a specific sum per student.

Internationalisation

As our economy is becoming internationalised, so are university studies. National and international organisations promote the exchange of students and lecturers. The introduction of the European Credit Transfer System has led to a rise in mobility and students are now given the chance to do parts of their studies in various countries and at various universities.

Alongside, the exchange of teaching staff is increasing, too.

'Incoming students' add to the internationalisation at home and 'outgoing students' gain international experience abroad.

Input to output orientation

The economy is increasingly switching over from an input-orientation to an output-orientation. In the days of input-orientation, work was measured on the basis of time. Employees were paid on the basis of their time at the workplace, not for their productivity.

Output-oriented pay means that only actual performance is remunerated. Tasks are laid down in a target agreement and it is no longer relevant how much time it takes to perform them. Fast workers are therefore paid better than slow ones. In intellectual jobs, smart and clever employees are paid better. They need to spend less time on performing a specific task and reaching a specific goal.

A similar change has taken place in the education sector. Teaching has been and still is measured in hours per week ('teaching units'). What counts is the hours a lecturer teaches, 'reads' to the students. The measuring unit is now switching to ECTS (European Credit Transfer System) points. Through this system, academic work is recognised across borders and students can earn credit for work done in another country or at another university. In addition, the system entails that lectures are no longer defined by teaching time but by the work involved for the student.

An ECTS point expresses the amount of time an average student needs to spend on acquiring a specific teaching unit. This includes the contact time with the lecturer and the time the students needs for self-study and revising.

Four ECTS points can consist of a one-hour lecture for which the student has to do an additional 3 hours of self-study. The four points, however, may equally consist of a four-hour lecture which does not require any additional work by the student.

It is only through ECTS points that e-Learning and distance learning have become measurable. In distance learning ECTS points may not require any contact hours at all.

This output-orientated measurement of teaching brings with it several advantages:

- Internationalisation is made easier; teaching units become transportable and are recognised by all accredited institutions of tertiary education in Europe.
- Students who are fast learners receive more ECTS points for less time expended; poor students must put in more time.
- Distance learning becomes measurable and is fully compatible with 'live' teaching.

Also teaching can be changed to output orientation. Payment linked with targets. For every semester it can be defined.

- How many hours the responsible teacher must be teaching?
- Which targets should be reached?
- Maybe which projects are done?

Just some presence hours in the office.

In this system evaluation has more importance.

New organisational form at universit

Due to the liberalisation trend, universities were more and more commercialized. Universities became companies. The rector or president of a university is now also the general manager. He is the only decision maker. He has a management with distributed responsibility with him. But he is responsible for academic and economic issues. Universities are big companies. Governments call this decentralisation and independency. The risk in this new system is that small units, and small scientific subjects get lost. Like in a company, the concentration is with the main business fields, with the big and economic, successful. These are the institutes and units, they have many students and low production costs. One teacher for several thousand students brings more profitability than a small group of students.

The owner of a university sets targets to the management. The university as a company is controlled via a board, which sets targets and controls. In the public universities the state in form of government acts with a representative board as owner. Very often the members of such a board are politically positioned.

The quality very often is put under pressure. Quantity and profitability has for hand.

Quality assurance departments inside the university and quality assurance agencies from the government are taking care, that the quality level remains high.

Partnership between students and teachers

The relationship between teacher and student became different.

- Hierarchy

First it was hierarchy based. The professor has known everything and the teacher had to follow him and his instructions.

- Customer

After the first demonstrations in the 60s of the last century, the students changed to a status like "customer".

- Partner

In this century the students are taken like partners. They are members of the university. This can be seen in the way of cooperation.

In the former time everybody who wanted to join the university was allowed and was admitted. The selection process was done via tests. The drop out rate was very high. Presently, more and more entrance tests – or placement tests – are made. The entry to a university is limited. But for those students, they have made the teachers take responsibility to bring them to a successful end.

Today a major factor is the drop out rate. If it is high, it is negative for the university.

Evaluation of teachers and students

Universities are breaking new ground as far as its organisation and funding is concerned. Special acts permits what would be impossible at a old university, namely:

- charging of tuition fees

- entrance examinations
- no tenured officials and professors
- professors hold four-year contracts
- evaluation of lecturers by students is a statutory prerequisite

The evaluation of students by teachers is nothing new and has been practised since the beginning of education. What is new, however, is that new communication technologies are now also being used in this process

For evaluation of teachers by students, questionnaires are distributed to the students which have to be manually entered into a database. Nowadays this is automatized and students give their opinions online.

Students use a Web site to access the evaluation system. The system provides them with a list of all courses not yet evaluated. After selecting a course, the individual evaluation questions can now be answered on a form. The completed form is then dispatched. The evaluation system now shows an updated list which no longer contains the course that has just been worked on. This interplay between filling in and sending it is continued until all evaluations up to the current date have been made.

Teachers always evaluated the students. Now, the students evaluate the teachers and this has an impact on the salary and the career of the teacher.

Networks

Democratic systems have changed. People are not any more members of societies. They are members of networks. The same is happened with universities. A university cannot be a standalone organisation. A university cannot be isolated and work just with the own staff. A university must be member of a network. To exchange results and experiences. With the figures of others it is possible to reach faster targets.

The European University Association discussed this issue during a meeting in June 2012. "During the two-day event, university leaders and funders exchanged perspectives and focused on how to improve relationships in the difficult present economic context. These discussions emphasized the need for enhanced cooperation within the sector in order to improve universities' strategic positioning in the knowledge economy. Forum contributors also shed light on the impact of funding reforms on university management and in particular highlighted that the effects of the increasing focus placed on performance-based funding are still to be seen."

Universities became more and more independent. This means also, that the president or rector act like a general manager. But many universities elect as rector one of their professors, who has no idea about managing a company. This university is losing for a period one of their good academics and getting a bad rector.

In networks they can learn from each other. For example how to use income diversification as a risk-mitigation measure. This should be accompanied by the necessary support for and development of internal management capacities. Internal management needs governance structures and human resources. "Identifying opportunities for cooperation and pooling resources within the sector was identified as a crucial element of strategic planning. Finally, it was also stressed that an increased focus on communication and quality allows universities to preserve and further strengthen their attractiveness to staff, students and funders."

The change in the organization like it was decided in the Bologna process would not be possible without networks.

International frameworks in research bring together, what was clearly separated for a generation before.

Student and teachers changed due to new technologies

Technology and the Human Being

Will human beings be replaced by technology?

Will technology be an aid or a yoke?

Tools should make life easier. If it is not a tool, then technology is a toy and useless for daily life. This means that technology has an entertainment value only.

Technology is an addition to and an extension of the human being. It makes the human being stronger and more independent. In the past, working the fields relied on having a number of workers. Today, one excavator can do more work than a hundred people a couple of hundred years ago. Humankind has always been concerned by this problem. Anton Chekhov, writing during the 19th century, believed that "science and technology are experiencing a great age, whilst for us, this age is crumbling, sour, boring, we ourselves are sour and boring, we bear rubber babies, and only St. Nothing has the gift of nature of getting drunk from dishwasher". This is Chekhov, a doctor, enviously describing the credit given to technology.

In his book "Die beste aller Welten" (The best of all globes), Gerhard Schulze wonders what it would be like if the world was a machine and human beings robots: "the responses human beings and organisations give make them similar to machines: if I wrongfully criticise a person, then this person will be upset; if it is known that the police has set a speed trap, then all drive according to the speed limit".

The factor "media technology"

Technology enters all aspects of life. It is present in economics, in education and the arts. Communication and media technology have become important in education, more than in other areas of work, as they are multipliers and determine the next generation's standards.

The questions are:

- Does technology influence the human being?

or

- Does the human being use technology as a tool?
In any case, technology influences our life.

Communication and media technology are the main factors which increase egoism. This technology supports the formula that the human beings want to have everything

- here,
- now, and
- immediately.

The networked egoist always wants to be first.

A generation ago, the telephone was an instrument to be shared. The family, the household, owned, if at all, one telephone. In the office, a group of employees shared a telephone. Today, everybody has their own telephone. According to the formula given above, nobody would consider sharing a mobile phone with colleagues and family members.

Even the car, a method of transport designed to carry a number of people, is used individually. Family members do not share a car. When one car is at the garage, it is difficult to find a lift with someone else.

The usage of television has changed. Video-on-Demand means that a film can be seen when one wants to, rather than when the TV station shows the film. A film can be watched when one has time. Broadband for mobile phones means that the location is flexible. The mobile phone turns into a television and provides the film one wants to see or the latest news regardless of the location. Video-on-Demand means: watching a film here, now and anywhere. This form of consuming audio and video does not replace the old medias such as theatre, opera and concerts, rather it has an influence on the way the old medias are consumed. The scientific notion that “new forms of media do not replace old forms of media” still stands, but the theatre is often treated as a television, where the theatre visitor may enter a discussion about what is happening on stage, without considering the other visitors’ need for silence. As if the play was a film on the TV at home. As if one was the only consumer. It is not a lack of consideration, it is an altered form of behaviour which cannot only be measured in terms of egotism.

Computers are a centre of information and knowledge, and the 400 year-old quote by Francis Bacon that “knowledge is power” has more meaning now than ever before. Knowledge means having power over nature. Knowledge means knowing more than the others. It means economic or personal advantage.

Technology doesn’t change, it strengthens. Pedestrians have few accidents. Cyclists live somewhat more dangerously, whilst every year, a million drivers die. They are all doing the same thing: moving.

Computers can hoard, keep secrets, and select specific information, so much more than if it were to be done manually. “The new media such as the internet and emails cannot prevent sciences from being tricked by information...the free flow of scientific information is an utopia, even in the computer networks, people are striving to achieve their goals, trying to achieve fame, forming groups and trying to keep others out of them. According to Froehlich, even the World Wide Web has scientific communities, which support each other and exclude others. Relevant information is still a valuable and limited resource. This is why information will be kept secret, given too late or not at all. “

Information is not only held back in the world of science, but in the world of economics too. Employees and bosses guarantee themselves better positions and advantages by not providing information. Corporate culture may suffer from this. Klaus Grawe describes this as follows: “One has to take into consideration that there is this fundamental need. People want to have their own space, and to have power over this space. Every person wants this, and it is indeed possible at no cost to the community.”

Interactivity

Only in modern times has media been given an interactive role. Originally, media was used to diffuse information. Electronic media initiated the playful cycle of uninterrupted giving and taking, sending and receiving.

A couple of weeks ago, Professor Weizenbaum asked me „How many new types of media do you know?“ My list was unimpressive. But what he was able to prove is that there are not that many new things. New media is often the old media. Five characteristics justify the label “new media”:

New forms of media can edit enormous amounts of data. More information is analysed in a few seconds than a human being is able to do in a lifetime.

New forms of media provide their services so quickly that print media and televisions cannot keep up with the provision of up-to-date information.

New forms of media present information to the whole world. They are not restricted to geographical areas.

New forms of media provide interactivity and a new quality of communication.

New forms of media adapt to the needs of each recipient. They focus on the consumer’s interests.

Media as a power factor

Power is bound to the human being. Power comes from doing. The human being wants to impose the own doing onto another person. Power means controlling the other. From a negative point of view, it can be seen as a master-slave relationship.

Doing is the most important asset the human being has. Doing is also bargaining. It is about deciding what is good and what is bad.

We evaluate, using our personal scales. Power over what is good is bad, whilst power over what is bad is good. This must be a trap! There is no good, and there is no bad. The question is “what has more advantages?”, and not “good” or “bad”. The issue here is drawing boundaries. It is about the positioning of advantages and disadvantages. It is nice to find differences. But they should not be separated.

The human being’s inner urge egoism makes one human want to impose his / her doing onto the others. This supremacy is important, it justifies one’s own existence. Supremacy means assertion and survival of the individual. Emanuel Kant based the question „What is a human being? “on the following three questions:

- What can I know?
- What can I hope for?
- What can I do?

Hegel sees “doing” as what is both useful and a blessing for humans. One should therefore do those things that are useful and a blessing. These were the two main elements of science up and into the 20th century. The introduction of electric energy was useful and beneficial for the consumer. But in the 21st century, this is no longer the case. What is useful is not necessarily a blessing. What can be done does not mean it should be done.

Descartes differentiated between the spirit and the body. If a person wakes up in the morning not feeling very well, and the thermometer shows that the body temperature is above 37°, it will confirm the person’s belief about feeling sick. On the other hand, if the temperature is below 37°, then the person assumes that they are not sick and that what one feels cannot be right.

Human beings do not suffer because science and technology are so bad, rather, because they are so good, and we want to employ them everywhere.

Knowledge is power. But in comparison to creation, knowledge is but a poor copy of reality. The world cannot be described. Galilei introduced a model of the world. A small world, to be used as a testing ground for real implementation. The sciences do not use reality, they limit themselves to using knowledge.

Knowledge is also responsibility. Those individuals who have more knowledge also have more responsibility than those who only have a little information. Politicians have a responsibility which they are often not aware of. They differentiate, separate and assess situations. They use their own national and cultural frameworks to solve foreign problems. In an egotistical manner, they want to make the whole world look the same. America has made itself to the world’s police force - they decide who is right and who is wrong. America decides which country is a “villain” to be fought and which is a friend to be supported.

But they cannot solve regional or cultural problems, and they are unable to close the gulf between rich and poor. Following each crisis, the poor get poorer and the rich get richer. War and military interventions worsen the local conflicts.

In economics, knowledge is treated as a trading good. Access to knowledge is guided by financial resources. This accentuates rich and poor. Money acts as a guiding instrument, but it is unable to show how to deal responsibly with knowledge.

Those with the greatest power were and are those in power, they are the rulers. In democratic countries the politicians have the greatest power. But are they really the most powerful? Is it not industry and global players who are in power? In the classic form of democracy, every citizen has the right of say. “Every voice is equal, the voice of the ignorant and the voice of the clever are equal”. The politicians’ main aim often seems to be re-election. They do not have the double burden of representing the people and carrying on with their job. In Colorado, the parliament respects the work the representatives carry out beside their political work: in summer, when the farmers have to work their fields, there are no meetings. Meetings are held during winter, the “dead” season.

But politicians have to work with the civil administration. The civil servants form the institution of democratic countries. Often they cannot be fired, and are thus protected from the different parties and politicians in power. In order to carry out their ideas, politicians have to gain the support of the civil administration. Friedrich Duerrenmatt says: „I am not a revolutionary. I am the president of this country and must obey its rules. I would ask you to do so too. Your fight against the civil offices must be just as courageous as a fight with a monster, do not demolish them but convince them”

The new technology and the electronic contact to the citizens, known as E-Government, brings together the different forms of media, but makes it more difficult to use power. Adolf Hitler would never have reached his position of power without the radio. New media is even more complicated, and may act as a barrier to the citizens. Here we are talking about the “digital divide”, the division of the clever and the not so clever. Norbert Silberbauer shows how the politician loses votes if the voice of the idiot is seen as being the same as the voice of the clever. But here is the opportunity to quickly and directly reach the target group.

The media, as a factor of power, can rapidly become independent. This is why the media is often described as “the least controlled power”. The work of a journalist is seen as dangerous for the people’s egotistic attitudes and is often experienced negatively. The journalist, like all those in power, has real responsibility. In a world dominated by market conditions, as is to be found in the 21st century, it is increasingly difficult to employ ethical standards. There is no longer a balance between the information available to the editors and the editors’ output. Industries’ PR and politicians’ press departments increasingly produce information which has not been researched nor analysed thoroughly. Technology influences many types of work, but it has great influence on the journalist’s work as it has a multiplicative effect. Journalists are not only the producers of information, they are producers themselves. In the print media, text is automatically adapted to the typesetting, so that the writer also determines the layout. With audio media and the radio, the news are prepared and produced into the appropriate format. The

journalist is therefore also concerned with the production of the information's appropriate form. PR departments provide attractive statements, the content temptingly taken for granted. This temptation comes from an economic pressure which stems from the liberalisation of the electronic media. There is no balance between what is offered and what is needed. Influencing the public opinion has never been as easy as with today's democratic structures.

„Politics and media complement each other. The boundaries between influence and power cannot be defined. Those who give society a name are those who are in power. Media is about power, not just the power to rule, but also the power over thought, feeling and the behaviour of a person”.

Bacher notes the change in the way journalists work, and how their work is linked to power: “When I started to learn the journalist trade, shortly after WWII, a type of work supported by the US occupying power in Salzburg, nobody, neither from the public nor from the specialists, talked about a “fourth power”. Not even our American teachers knew anything about it. Following Hitler and the media he had used, anything that dealt with violence was eyed with suspicion. We learned classic Anglo-Saxon journalism, we were to report, explain, form opinions; the media was not to be in power, it was to control public power. The first commandment: opinion and reporting were to be kept strictly separate”

With this statement Bacher shows how the media has changed in the last 20 years. In the seventies, opinion was more important than information. But Universities changed that. The media and the journalists became an end in themselves; they became a form of power. A change which can be “diagnosed” internationally. The last war in Iraq is a good example. The reason for declaring war, that Iraq produces chemical weapons, has never been proved. Yet the media has not criticised this. Democracy became a world dictatorship. The mass media is power, influence and violence. Egotists are powerful. They use, if the opportunity arises, their influence. This can be seen with many journalists.

Beside the journalists, economies use their power through advertising. Dependence on advertising and the money it brings is increasing. Liberalisation has brought small institutions and small media companies into the game, and they are even more dependent on the money generated.

Employability

Students should be trained and educated in fields, there is a need in the labour market. The European Union called this EMPLOYABILITY. It is a success factor for a university, when its alumni get good jobs and when they are not jobless. More and more countries publish statistics, in which is shown how many students of which university in which subject are jobless.

This has an impact on the way of teaching. Especially in the communist countries it was negative having had contact and cooperation with industry and business. The scientific world should be clean from business ideas.

Today practical business and industry projects are integrated in the curriculums. Students write a thesis for a problem, which exists in a company. Especially in Universities of Applied Sciences there is one semester that students work in a company under the guidance of the teaching staff of the universities. This is the first contact of the young people with business and with economy. Many of them work later on, when they are finished and graduated in the same company.

For the companies it is a selection criteria. They can test young people if they fit into the organisation.

For Kosovo the labour market is not just Kosovo. This would be too small. The labour market for Kosovo is Europe. Important in another aspect: the population of Europe is shrinking. In the next decades Europe will lose around 50 million inhabitants.

This brings a shortage in the working level. Kosovo with a high percentage of young people can be exporter of knowhow and exporter of labour.

The integration of economic philosophy into our universities has also an impact to student organisations.

They act like companies by themselves and have their own shops, where they sell material for students, scripts and books. Also this is training for the business life.

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