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Message from the Editors

TOJNED welcomes you. TOJNED also thanks all researchers, practitioners, administrators, educators, teachers, parents, and students from all around the world for visiting the volume4 and issue 3. TOJNED has diffused successfully innovation on new development in distance education and e-learning around the World.

TOJNED is a quarterly journal (January, April, July and October). This online periodical is devoted to the issues and applications of education. Reviewed by leaders in the field, this publication is designed to provide a multi-disciplinary forum to present and discuss all aspects of distance education and e-learning.

TOJNED provides new developments in distance education forum and focal point for readers to share and exchange their experiences and knowledge each other to create better research experiences on distance education. The main purpose of this sharing and exchange should result in the growth of ideas and practical solutions that can contribute toward the improvement of distance education.

TOJNED records its appreciation of the voluntary work by the following persons, who have acted as reviewers for one or more submissions to TOJNED for v4i4. The reviewers of this issue are drawn quite widely from distance education field. Reviewers' interests and experiences match with the reviewed articles.

I am always honored to be the editor-in-chief of TOJNED. Many persons gave their valuable contributions for this issue. I would like to thank the editorial board of this issue.

TOJNED invites article contributions. Submitted articles should be about all aspects of distance education science. The articles should also discuss the perspectives of students, teachers, school administrators and communities. The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to TOJNED. All authors can submit their manuscripts to aytekinisman@gmail.com for the next issues.

For any suggestions and comments on the international online journal TOJNED, please do not hesitate to contact with us.

July 1, 2014

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Contemporary problems of the higher legal education reform in Russia in terms of the provisions of the Bologna Declaration

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ABSTRACT

The article presents a complex analysis of problems of implementation of the Bologna Declaration in the territory of Russia. The authors analyze legal, organizational, political, philosophical and other aspects impeding the full-scale transition of Russia to European educational standards, offer constructive suggestions regarding overcoming these obstacles. Particular attention is paid to the problem of Russia ignoring European educational values, without which introduction of bachelor's and master's degree programs is no more than a technical and organizational solution. Implementation of our suggestions will improve the quality of teaching in the master's degree programs of law universities in Russia, increase the academic mobility of students, as well as methods of organizing of work of legal clinics at universities. Suggestions made by the authors regarding problems of education reform and ways of overcoming them are relevant for other countries existing in the Post-Soviet area.

Keywords: Bologna Process; legal clinics; higher education; bachelor's degree programs; master's degree programs; academic mobility

INTRODUCTION

In the XXI century the European education system has acquired new trends, the background for which was created still in the late XX century. It is about implementation of the provisions of the Bologna Declaration 1999 in the national educational area creating the background for further development of university education, including legal sciences.

There are various expert estimates of the modern world education market, they vary from 50-60 billion dollars (according to the WTO) to 30 billion dollars (according to the OECD). The number of foreign students studying outside their home countries more accurately reflects the scale of this market. By 2025, according to UNESCO, the number of foreign students in the world will have increased from current 2 million to 5-7 million, two thirds of which will include people from Asia, especially from India and China. (Global Education Digest, 2004).

In terms of global trends of growth in demand for education, in Russia this dynamics has a controversial nature. It manifests itself in the fact that the issue of legal education is excessively politicized by the leaders of the country who do not understand the full nature of humanistic essence of legal education. According to multiple speeches of Russian senior politicians it is necessary to artificially reduce the number of lawyers graduating from universities and to reduce the law faculties to a minimum. It is usually reasoned with the fact that the country needs workers, engineers and builders, who supposedly are not enough, but we have too many lawyers, they are badly educated and many of them are not employed (Fursenko suggested reducing the number of law universities; The President of the Russian Federation ordered to reduce...).

These statements are debatable.

1) the number of lawyers per capita in Russia is still less than in some European countries and the USA. According to N.I. Pobezhimova, about 50% of American and 40% of English graduates are lawyers, in the leading states there is one lawyer among 10 people working in various fields of activity (Pobezhimova 2003). Meanwhile, Russian officials do not provide the society with estimates of the "required" number of lawyers;

2) many lawyers obtain education at the state but at their own expense, they do not always seek to hold a legal responsible position in the public service sector or in a private company. Many of them do it for their own development. As for bad or good universities, such claims are groundless in the absence of criteria for evaluating universities (objective rating of all Russian universities);

3) Russia does not need workers and engineers, because more and more plants go into bankruptcy and liquidation in recent years. The country lives almost in terms of trade in raw materials;

4) Russia has serious problems with training of physicians, teachers, engineers, agronomists and other qualified specialists. Overemphasizing of legal education problems is not correct.

We should note that the leading Russian legal scholars occasionally rebuff such nonconstructive statements, pointing out that, instead of prosecution of lawyers, the state authorities, based on the principle of economic interest, must, first of all, take distinct steps to increase the prestige of the professions of engineer, designer, constructor, foreman, agronomist, livestock expert. It can be achieved by means of an increased educational allowance, guaranteed employment after graduation, housing solutions for young specialists, etc (Kamyshansky 2008).

From our point of view, the problem is not in the fact that Russia has a lot of "bad" lawyers, but in the fact that, firstly, an authoritarian state (the one the Russian Federation is under Vladimir Putin) does not need people with legal education at all, because they only hinder the ruling bureaucracy from living peacefully with their claims to the European Court of Human Rights and other institutions.

Secondly, Russia really has a lot of universities, which award diplomas but do not give knowledge. It happens because, on the one hand, the Ministry of Education and Science of the Russian Federation, while supervising universities, does not close obviously inefficient universities for corruption reasons, on the contrary, it often redundantly checks honest universities that do not have the ability or desire to be engaged in corruption. We know quite a lot of such cases in different cities. On the other hand, Russia has almost no means of social mobility ("social lifts") which are available in the EU and the USA, i.e. the possibility of highly qualified graduates to make a personal career. In Russia, you can make a career either having bribed a prestigious employer or having received patronage from senior relatives or friends. In these circumstances the students simply do not have the right motivation to learn law seriously, especially because in terms of total corruption in Russia it regulates little. It leads to development of corruption in the education system as well, which is widely discussed in Russia (Stavilo 2008).

Having such discussions and problems Russia joined the Bologna Process in 2003 and began to implement its main provisions. Since the early days of the reform the law students, staff and graduates faced with the following problems.

Firstly, the academic staff still does not always understand the difference between master's degree programs and specialist's programs and forms (and lectures) master disciplines in the old way. Secondly, students who completed a bachelor degree can not find jobs with their specialization, because there is no list of positions which bachelors and masters can hold. As Confucius once wrote, "it is not easy to meet a person who, having devoted three years of life to education, would not dream of a senior position". However, in the mass consciousness of the employers masters are the same previous graduated specialists (five years of study) and bachelors are people with incomplete higher education. Some state authorities even issue official (or unofficial - it happens in Russia) clarifications that only masters can be employed for public service. For example, the system of general and arbitration courts has actually established restrictions preventing bachelors from holding judicial positions. The Higher Qualification Board of Judges of the Russian Federation even issued special clarifications, in which it stated that the bachelor's degree in law is only the first stage of higher legal education which does not grant a right to be appointed as a judge (Yashchuk 2011).

On the contrary, in most foreign countries involved in fulfillment of the requirements and procedures of the Bologna Process, the vast majority of bachelors even after three years of studies begin to work and, if they decide to get a master's degree, they do it after gaining life experience. Positive data about successful mass employment of bachelors come from England, Ireland, Norway, Sweden, Latvia, Lithuania and Turkey (Trends IV: European Universities Implement Bologna, 2005).

Let us try to find out what achievements and difficulties occurred in Russia during the period of reforms and in which way this experience can be used by the countries in the Post-Soviet area in reforming their own education systems.

1. Main advantages and values of the Bologna Process

1.1. European values and educational goals and objectives

The Bologna Process is gradual approximation and harmonization of the higher education systems of the European states to create the unified European Higher Education Area. This process officially commenced on June 19, 1999, when the Bologna Declaration was signed. The Bologna Process currently has 47 participating countries, including Russia (since 2003). Its main goal is to "promote mobility by overcoming obstacles for effective free movement". As a result of implementation of the provisions of the Bologna Declaration levels of higher education in

the countries participating in this agreement became similar to the fullest extent and the academic degrees granted after completion of education much more transparent and easily comparable.

Among other goals of the Bologna Process we can point out expanding access to higher education, further improving the quality and attractiveness of European higher education, expanding mobility of students and staff, as well as ensuring successful employment of graduates due to the fact that all academic degrees and other qualifications should be focused on the labor market (Wikipedia. The Bologna Process, 2014).

In order to analyze all the aspects of the Bologna Declaration, problems of its implementation in the EU states and Russia, it is necessary to write a thick book. Therefore we will try to pay attention to the most important, in our view, problems impeding implementation of its provisions.

In Russia, the majority of subjects of educational relations (students, staff, administrations of universities, the Ministry of Education and Science), understands the country's accession to the Bologna Process as an organizational and technical procedure. Meanwhile, the very Russia's accession to the Bologna Process was accompanied neither with discussion by the Ministry of Education and Science of the Russian Federation and the education community, nor with detailed information about the goals and objectives of this procedure. As a result, it is not surprising that according to opinion polls 47.3 % staff and 39 % students perceive Russia's transition to bachelor's and master's degree programs negatively (Popov 2011). Moreover, even the initiators of Russia's accession to the Bologna Process have just a rough idea of the system of humanitarian values on which the Bologna Process is based.

We believe that the main goal of the Bologna Declaration is creation of the unified European Higher Education Area based on the international recognition of the competitiveness of universities, mobility of students and staff, expanding employment possibilities for students. Higher education has broader aims of social, cultural and human development as well. The European Higher Education Area is the result of general values and the common social and cultural heritage (Lourtie 2001).

Contrary to the stereotype popular in the educational environment of Russia, the Bologna Process is not aimed at reducing the diversity of national systems of higher education or the abandonment of the national education policy. Johanna Witte emphasizes that from the very beginning implementation of the Bologna Process implied searching for a balance between such goals, as approximation of education systems of the European countries and preservation of their diversity; standardization and autonomy, compatibility and competition. As a result, the diversity of the national education systems was preserved (Witte 2007).

Interaction between national education systems consists in the fact that the models that were found in certain national conditions may be used in other national systems. One of the factors promoting the convergence of the national education systems is the existence of a universal, uniform policy and, consequently, spread of common goals in the European policy (Ahola and Mesikammen 2013).

The purpose of a European dimension to quality assurance is to promote mutual trust and improve transparency while respecting the diversity of national contexts and subject areas. The primary responsibility for quality assurance in higher education lies with each institution itself and this provides the basis for real accountability of the academic system within the national quality framework (Julkaisupalvelut 2005)

As it was mentioned in the Convention of European Higher Education Institutions (Salamanca, Spain, 29-30th March 2001), freedom of universities should help them to adjust rapidly to "environmental changes" and to the requirements of local, national and international partners. Universities have to be able to enter into new partnerships, including with commercial partners, and they need to be able to act quickly. This calls for new leadership, flexibility and independence to plan strategically.

Besides freedom universities are also willing to accept the necessary responsibility for use hereof. Institutions of higher education should prepare their students so that they can be in demand in the labour market in their future professional career (preparation for job search and managing one's career). In conjunction with their public and private partners, they should establish career centres for such purposes. Mobility of students and staff promotes the ability to cope with a new cultural and learning environment and to understand other cultures.

More diversity of curricula will further competition needed to attract students from overseas. Competitiveness and co-operation are not mutually exclusive. Competitiveness means academic quality and cannot be reduced to a commercial concept only. Higher education institutions are important actors in civic society. It is the governments' responsibility to guarantee that all citizens have equal access to higher education, regardless of their social background. This means providing students with adequate funding in the form of study grants and the higher education institutions with enough funding to exercise their public tasks. Accessibility and diversity have traditionally been the cornerstones of European education (Convention of European Higher Education, 2001).

The very process of transition to the new Bologna standards was not simple and easy in any country of the world. The countries of Eastern Europe, having lived under the communist regime for many years before, experienced difficulties similar to Russian ones. As Romanian colleagues noted, before the reforms the university system in Romania focused on the fact that the student should memorize and reproduce the information, but it did not insist enough on gaining knowledge or stimulating creativity. A student was perceived by the educational system as a collectivist, and therefore insufficient attention was paid to individual education.

Moreover, in terms of education only national standards and achievements were used, even though knowledge is a global matter. Finally, the education system was excessively centralized and inured to corruption. However, reforming of such a system is inter-linked with other necessary reforms (economic, administrative reform, etc.). Only comprehensive approach to reforming may provide success of the education reform (Horobet and Chiritoiu 2014).

Unfortunately, the education reform being introduced in Russia is not only associated with other necessary reforms (in the economy, policy, social area, etc.), but also is not based on European values. Moreover, in constant speeches of the President of Russia and other senior politicians, the European Union and the United States are declared as the chief opponents of Russia, and the authoritarian states like Syria and Belarus are mentioned as allies. In terms of censorship and lack of freedom of speech it is impossible to implement the Bologna system based on universal values. That is why Belarus, even more authoritarian country than Russia, is not included in the Bologna Process, but in 2015 it will be still given such a chance ([Bologna Process And The Last Outsider in Europe](#), 2012).

We should note that attempts to implement external, organizational and technical aspects of the Bologna Process do not give positive results in Russia. The education market existing in Europe implies the emergence of competition, which requires the universities to make effective management decisions, to create conditions for the most efficient creative self-actualization of the staff and students. In Russia there is no competition between universities. Any state university knows that regardless of the quality of its education, students living in this region will always come to the budget (free) places. There is no objective rating of Russian universities either.

As Nicolae Dură noted, establishing the hierarchy of the universities should mainly consider the criterion of the Research Quality in the Higher Education Institutions, not the number of students and professors, geo-political importance of the specific city or country, political or economical reach, etc (Dură 2014). Some of available Russian ratings, unfortunately, still have much subjectivism.

The international ratings mention, perhaps, only Moscow State University. Some other universities are at the end of the list. Attempts to increase funding for individual institutions selected according to the opaque criteria to provide their entry in the international ratings gave no effect. We are strongly convinced that funding one or more universities it is impossible to enhance the quality of education throughout the country the education system of which is going through a systemic crisis.

Hence, it follows that formation of the unified European Higher Education Area is an irreplaceable factor for social growth and a necessary component of consolidation and development of European citizens, providing students with the necessary competence sufficient to meet the challenges of the new millennium. Only realization of the European identity, understanding of the community of values and belonging to a common social and cultural space is one of the main conditions for successful introduction of the Bologna ideas.

1.2. The Bologna Process and investments in the human capital

The main significance of the Bologna Process consists in the fact that it promotes investments in the human capital. It is not understood by the authorities in Russia, which initiated the accession to the Bologna Declaration. Meanwhile, all European Union countries pay great attention to investments in human resource development. Ireland is one of the best examples of the positive effect of investments in human resources development. Thirty years ago Ireland was dependent on aid from rich countries. Today, its GDP per capita is the second highest in the EU (after Luxembourg). The key to their success is planned development, introduction and management of investments in the human capital. The National Development Plan of Ireland highlights the crucial role of the human capital development for economic growth and development. Investments in the human capital were declared the priority in 2007-2013 and were approximately estimated at 25 800 million euro.

Investments in the human capital manifest themselves most vividly in education. According to the Brazilian Statistical Office, in 1998 the difference between the monthly salary of a university graduate and employee without a diploma was 814 % (Ćirić and Đurđić 2014). According to data from the Statistical Office of the Republic of Serbia, the difference between the salary of the most educated employees and unskilled workers in September 2008 amounted to 256, 83%. Moreover, it is noted that an increase in salary according to the level of education is accompanied with fall in unemployment. It is clear that more and more people consider education as investments which in the future allow to claim for higher incomes and a higher quality of life. Education not only has positive effects on people, there

is also strong evidence that the human capital and education are potentially important driving forces for long-term growth (Ćirić M and Đurđić 2014.).

Similar beliefs are common in the rest of the world as well. For example, Egypt officially believes that education is the vehicle for economic development, the natural way for improving one's position, income, and class in the society (Helal 2011).

Lack of government investments in the human capital in Russia leads to a rise in unemployment, a drop of culture and morality, which is reflected in the increase in crime, homophobia and nationalism. At the same time it would be still possible to explain the annual reduction of spending on education, science and culture with absence of budget funds. Meanwhile, analysis of federal laws on the budget for any fiscal year shows that trillions of rubles are spent for the Olympics in the subtropics, football championships, arms race, financing of special services fighting against the democratic opposition, etc.

Hence, it follows that that in the coming years Russia will probably overcome some organizational and technical issues of the transition to the Bologna standards, the curricula will be improved, various instructions will be written. However, there is reason to hope that the Russian education will be based on the principles of internal autonomy of higher education institutions, freedom of research and teaching. It seems that the Russian higher legal education will be competitive and of a high quality only when the country's leadership will change its priorities.

2. Problems of the higher legal education reform in Russia

2.1. Organizational problems of the higher education reform

In Russia introduction of the two-stage bachelor's (four years) and master's (two years) degree system instead of the Soviet system of specialists of five years gave rise to a number of objective and subjective problems. The objective problems include the abovementioned problem of impossibility for bachelors, lawyers by profession, to be employed, as well as the gradual elimination of such a traditional educational form (since the Soviet times) as a special secondary (professional) education, which is in fact a bachelor degree now.

The problem of the possibility of admission to a master's degree course, for example, in law, of representatives of other sciences – technical, natural, economic, etc, is still unsolved. This creates a number of additional problems for the staff, which has to, instead of a dialogue with professionals, constantly refer to the basics of legal theory to explain the elementary things to students. The university has to admit these students on a contractual basis, as otherwise a professor does not have 900 hours of annual educational load necessary for one basic rate (for the same reason they can not be expelled). This situation can be settled with the use of experience of a number of the leading European universities (in particular, Sorbonne), where all bachelors are admitted to master's degree courses, and then some of them unable to master the curriculum are gradually expelled. In this case, a lecturer concludes an individual contract, payment under which is not related to the number of students.

We should also point out the problem of entrance examinations of bachelor's degree programs, which are held in the form of the Unified State Examination (USE) in Russia. High school graduates take such an examination, the results (points) received at this examination are the basis for admission to higher education institutions. Senselessness of this system was indirectly acknowledged by its authors themselves from the Ministry of Education and Science of the Russian Federation, as they allowed a number of Moscow universities to which they have special liking to organize entrance examinations. Defectiveness of this system is in the fact that it is much more difficult to control several hundred thousand schools with respect to corruption than a few hundred state universities.

As a result we sometimes observe the situation when a school-leaver from the Caucasus comes to a Moscow or regional university with the maximum USE score, but hardly speaks Russian. Meanwhile, to fight against corruption in high school (exactly the way the USE authors explained their reform) it would be enough to install a web camera (remaining after the presidential elections) in the classrooms where the entrance exams are held, providing any representative of the civil society with the opportunity to monitor their progress, followed by the possibility of appealing the results of such examinations in court. Teachers holding leading positions in the rating and involved in the advisory institution under the governor could serve as arbiters in assessing the quality of answers at the entrance examination.

Another problem being little discussed so far consists in the fact that in the era of globalization traditional ideas of job borders and, consequently, about educational competencies have shifted. Thousands of new jobs beyond the "lawyer", "economist", "political scientist", etc. will appear in the near future. This fact was little taken into account while developing Russian educational master's degree programs in law.

It is done only in some universities. Thus, in Plekhanov Russian Academy of Economics (economic higher education institution) train lawyers with good knowledge of economy (financial and legal specialization); the

International Independent University of Environmental and Political Sciences provide environmental legal specialization; the Russian Academy of Justice – informational and legal specialization. Their graduates are in great demand. It is necessary to open new specialties, both stipulated by the Ministry of Education (“Applied Informatics in Law”) and those that will be in demand in the future, for example, “Law and the Media” (Grib and Kutuzov 2008).

2.2. Why does not the principle of academic mobility work?

The problem of academic mobility and freedom is poorly developed in the Russian legal science, although the Bologna Declaration in relation to the higher education widely uses this principle. In the prerevolutionary Brockhaus and Efron Encyclopedic Dictionary, “academic freedom” is understood as the right of universities “represented by professors to the self-administration, determination of teaching programs and internal procedures of higher education, the choice of professors and rectors independently without interference of the outside administrative authority”. The doctrine of academic freedom is traditionally studied by the philosophy of law and established in the legislation of many states, as well as the Constitution of the European Union (Volosnikova 2006).

In 2006 the Committee on Culture, Science and Education of the Council of the European Parliament unanimously adopted Document No. 10943, in which, inter alia, it was provided that the academic freedom in scientific research and training should guarantee the freedom of expression and action, freedom of information distribution and freedom of unlimited possibilities for the dissemination of knowledge and truth (Council of Europe 2006).

One of the central problems in the implementation of the principle of the academic mobility is its financing. In foreign countries, various models of academic mobility financing are being formed.

One of the most common models is national and interstate programs to support the academic mobility. The former are governed by the domestic laws, the latter are subject to the requirements of the relevant international treaties and agreements.

Among these programs “Erasmus Mundus” holds a specific place, it is an academic mobility program funded by the European Union “covering” almost all countries of the world. Its main objective is to strengthen the cooperation and international links in the field of higher education by supporting high-quality European programs. The program is designed to give a distinct European focus to the higher education. The program is implemented in three areas (modules): joint master’s and doctoral programs that provide scholarship support; partnership of universities; enhancing the attractiveness of European higher education. The financing of the academic mobility not covered by special programs can be performed by means of so-called “education vouchers”, which are understood as cash certificates issued by the state to students (or their parents) to pay for their studying (Kozyrin 2011).

Actually Russia almost does not take part in such programs aimed at academic mobility financing, and it is the main economic obstacle for Russian students to study in European universities.

The second reason is of the organizational nature. The fact is that the Ministry of Education and Science of the Russian Federation poorly exercises the functions of educational programs coordination. The problem can be illustrated with the following practical example. So, in the city of Volgograd three universities implement master's programs in civil law.

With regard to the above mentioned at the first educational institution (Volgograd State University, hereinafter referred to as VoISU) the Master's degree program in the civil law mainly focuses on the study of private international law (disciplines “The corporate law in the global context”, “Legal basis of EU economic and social regulation”, “Formation of a global legal system in the modern world economic conditions” etc.) (Official website of Volgograd State University, 2014).

At the second educational institution (Volgograd Institute of Business, hereinafter referred to as VIB) the author practice-oriented master's degree program on property law (disciplines “Property legal structure”, “Legal regulation of real estate activities”, etc.) (Official website of Volgograd Institute of Business, 2014).

At the third educational institution (Volgograd branch of the Russian Academy of National Economy and Public Administration, hereinafter referred to as VB RANEaPA) the master's degree program almost includes the same disciplines as the bachelor's degree program, but they are studied in-depth. For example, they are special courses “Actual problems of civil rights protection”, “Property rights and other proprietary rights”, etc. in the framework of the general part of the civil law, or “Marriage and family relations with a foreigner”, which is a fragment of the basic bachelor's degree course on the “Family Law” (Official website of Volgograd branch of the Russian Academy of National Economy and Public Administration, 2014). Simply stated there is no author's concept of the master's degree program on the civil law in VB RANEaPA. This very common trend in Russia is negatively evaluated by the legal community (Ivakhnenko 2014).

As a result, even within a single city a student cannot implement the principle of academic mobility simply because the curriculum are not coordinated, and therefore, after studying for a semester at another university and returning back the student does not receive a successive view of civil science. His perception of civil law will be like a mosaic. However, it appears that the unified concept of knowledge and skills that a student should receive shall be within the narrow specialization of the master's degree program in civil law.

In other words, out of these three components of the master's program in a particular city in three universities only disciplines of the general scientific cycle ("Philosophy of Right", "Comparative Law", etc.) are the same for all areas of the master's degree programs in law. The inconsistency of the professional cycle (including elective courses) makes it meaningless to transfer masters from one university to another, even for one semester.

Hypothetically, the deans of the three universities of the same city can negotiate, conclude a contract, ordering at least the professional cycle of the master's degree program in civil law. However, if a master's degree student from any Volgograd university decides to study for a semester in another city in Russia or in a foreign university in terms of academic mobility, the problem becomes intractable even theoretically. For example, if we go to the website of the Sofia University (Bulgaria) (Sofia University «St. Kliment Ohridski». Official website, 2014), we will find no master's programs in civil law there. The existing master's degree programs ("justice", "public administration", "international law and international relations") do not match the majority of Russian master's degree programs in law in principle, because they are created not on the principle of legislation branches, but according to other criteria.

What could be the way out of this situation? It seems that under the principle of academic freedom there is no need to impose the description of specific disciplines upon universities within the national frameworks as well as in the international ones especially. Such self-restriction is only possible on a voluntary basis as a result of contractual contacts between universities. However, national education regulatory authorities are permitted to perform coordination functions, which means the creation of an information portal on the site of such an authority, which would accumulate all information about master's degree programs of all universities and specialties including legal ones. If you look at the advantages of such a system within the above example, it will allow the deans and the professors - the heads of master's degree programs to get information on similar concepts of graduate students training in other regions. In turn, this information will facilitate the entry of universities, for example, Volgograd, Khabarovsk and Magadan in contractual relations, development of online education (this will be discussed below), development of academic mobility (offset tuition fees), etc.

To enter into a similar agreement between Russian and European universities in Russia it is necessary to go back from the principle to form master's degree programs for graduate students on the branch basis (civil law, criminal law, constitutional law, etc.).

Another way to coordinate the activities of the national ministry of education is a breakdown of the major specialty into smaller subgroups. For example, regarding the already mentioned civil law, we should distinguish "Civil Law. Property Law", "Civil Law. Tort Law", "Civil Law. Family Law", "Civil Law. Real Estate Law", "Civil Law. Copyright", etc. In this case, one particular university will have not only one master's degree program but two or more (depending on the number of leading professors). And then a graduate student from Magadan having arrived under the principle of academic mobility for one semester in Volgograd will be able to get the successive knowledge, for example, according to the same master's degree program "Civil Law. Property Law". Thereby the specialization of master's degree programs will deepen, while all conditions will be created in order a student could choose programs of interest and professors within at least one country.

There are noteworthy examples of Russian universities' activities (for example, Moscow State Institute of International Relations - MGIMO) to establish relations with European universities, their partners. Such strategies include the issuance of double diplomas. There is some information regarding the cooperation of Russian-French graduate schools, joint graduate school of MGIMO and Free University of Berlin, joint graduate school with the Italian University of Trieste, joint Russian-Norwegian graduate school. Two-year period of study in a joint graduate school is divided between universities into equal parts, where a student studies at MGIMO for one year, and later at a partner institution for another year, or vice versa. Russian students abroad are often taught in English (even in Germany and Italy). Universities agree to record the training at a partner university for the issuance of a diploma. Quality education is provided by the mutual balanced analysis of curricula and careful selection of the partner-universities. According to the Bologna canons the education at foreign universities under such programs is free, and even a student, who studies on a contract basis in Russia shall not pay for his education at a partner institution, as he already paid his tuition fees to the university which he entered. Solving these problems begins to take shape in the reasonable cooperation on the basis of the student exchange between partner-universities (Gladkov 2006).

It seems that under the coordination function of the Ministry of Education and Science of the Russian Federation, this experience could be generalized and presented in the form of guidelines to other universities.

The problems of master's degree programs comparability are discussed in European science. For example, in relation to Serbia it was noted that it is necessary to develop academic programs that are compatible with those carried out in universities in other countries of Europe. Also psychological problems during the transition to Bologna standards are similar in Russia and Serbia, as the human nature is the same everywhere. Maja Ćirić and Sanja Đurđić mentioned that in Serbia every time when you need to make changes in an organization (including educational one), there is people's resistance. One of the reasons is psychological. People find it hard to abandon the established habits and routine behaviors. Fear of change is triggered by personal insecurities and fear of losing their position and privileges obtained in an organization (Ćirić and Đurđić 2014).

Meanwhile, it will be difficult to implement the idea of the academic mobility in most universities in Russia (especially in the provinces) not due to economic or psychological reasons but to organizational ones. Russian Professor's load is 900 hours per year. If under the principle of the academic mobility 10 of 20 graduate students leave to study abroad, the number of hours per year will definitely decrease. Consequently, the university administration will transfer this professor to 0.9 basic rate or less, and that will lead to the reduction in his salary. The result is that Russian professors are the most uninterested people in implementing the strategy of the Bologna Declaration regarding the growth of the academic mobility of students. The way out of this situation is to conclude contracts between universities and academic hours offset, but in Russia this strategy is implemented only on the initiative of individual institutions.

Another difficulty lies in the fact that most university professors in Russia are not proficient in foreign languages, and therefore can neither participate in lecturing in European universities nor organize lectures in English at their university.

3. Raising the practical orientation of higher education

One of the key conditions for the implementation of the Bologna Declaration is a close relationship of legal education and practice. As they say in China, if there is only the rule of law, but there are no qualified legal professionals, the rule of law is a castle in the air (Ling 2006).

The task to consolidate practical skills of students in Russia is solved in two ways: organization of students' practice in state and local governments, commercial companies and public associations, as well as through the establishment of legal clinics. Further we will be interested in the latter field of concern of universities.

In Russia legal clinics are established almost at all law departments, although of course their performance is different. Clinics are an integral part of the educational process.

Education in a clinic brings the ability to work in a team, develops social skills and cooperation on an equal footing, and a student has the opportunity to fulfill himself as a creative person and acquire the additional knowledge base in the law enforcement practice, the experience of communication with legal practitioners, share his ideas, suggestions. This environment helps to be engaged in research activities on issues of concern.

Thus, the legal clinic is an indispensable tool for educational influence. It promotes the development of professional identity and leadership skills of students. Clinical education greatly promotes the formation of the student government, development of active citizenship of young people and improves the morality of the future generation (Chikildina 2009).

There is an interesting experience regarding the arrangement of activities of the Center for Legal Counseling and Education at Volgograd Institute of Business. It is divided into two units: Legal Clinic and Volunteer Organization. In the most general form the responsibilities between them are distributed on the following basis: legal advising to low-income citizens (Clinic) and graduate students' activities (e.g., lectures in schools) aimed at the legal education (Volunteer Organization). Only in the period of 2009-2013 the Clinic provided free legal assistance to 1500 citizens, won 12 cases in court, the decision on which entered into force. If we talk about the content of the consultations, their structure in 2013 is as follows: 59 of 119 consultations were of a civil nature, 12 - labor law, 12 - social security right, etc. In addition, lecturers and students of Volgograd Institute of Business annually participate in the Days of free legal advice, during such days 240 people were consulted as of the beginning of 2014.

Recently, the authors of this article performed a survey of managers and staff of 31 private, state and municipal enterprises and institutions. Business managers were asked to review the knowledge and skills of students and graduates (legal profession) of the city of Volgograd, who come to them for work. Responses were as follows:

- Practically zero, it is necessary to retrain - 2;
- Rather weak, lack of knowledge and skills - 6;
- Average, basic knowledge is available - 8;

- Good, he can work in the specialty - 12;
- Great, he is able to perform any task - 3.

According to the results of the survey they also found that in general, respondents require that lawyers have such qualities and skills as trainability, ability to search for and interpret information, knowledge of information technology, communication skills, including language skills, adaptability, flexibility, tolerance and the ability to self-presentation. And only after that list they have mentioned the basic knowledge of Russian legislation and the ability to apply it in practice, the ability to prepare legal documents, knowledge of legal ethics, etc. The results of the survey have also shown that one of the major professional competences is the ability of lawyers to resolve conflict situation, not bringing a case to court. In addition, a number of respondents also have noted the following requirements for lawyers: the ability to take responsibility for their own advice, ability to convincingly defend his point of view, to speak well, to express thoughts clearly, and to transfer their knowledge to managers and employees of the organization; capability to provide the security of a leader's decisions, to give warning of problems. Incidentally, the last skills are not stipulated in the Russian state standards.

Thus, the analysis of the content of qualification and competency requirements of a lawyer imposed by particular employers evidences their apparent discrepancy. Clinical legal education in some way contributes to bridging the gap between them. One of the problems of higher legal education is that it is not adequately ensures an adequate level of practical skills training, and after the introduction of a rating system for full-time students it will be difficult to combine learning and practice. Therefore, when compiling the training program of the clinical education course it is necessary to consider the complex of skills that should be the basis. The analysis of skills gives rise to changes in courses and curricula (adjustments may be made to implemented courses regarding skills being formed within its frames, addition of new sections to courses, and occasionally the introduction of new disciplines).

While compiling the course of clinical education it is required to focus not only on the prescribed standard qualifications for a professional training of lawyers, but also on competence required by employers. This approach to the determination of the content of clinical education is certainly time-consuming, requires a lot of preparatory work for the study of the legal services market. However, without it the feasibility of the existence of the clinic and focus of its work can be doubtful. It should be noted that the value of the analysis of skills required lies in the fact that in the course of this activity there was a real interaction of a university (represented by a legal clinics) with the social partners (interviewers have noted the interest and willingness of all respondents to cooperate), which contributes to further development of a social dialogue, motivates employers to interact with a university, as they get the opportunity to influence the quality of education.

4. Use of network technologies in implementing programs of higher legal education within the frames of master's degree programs

The task to continue the higher legal education in Russia (including all of the above difficulties) is possible only through cooperation and interaction between higher education institutions participating in training of masters of laws. Federal Law "On Education" dated December 29, 2012 No.273-FZ provides the possibility to implement educational programs by an educational organization as independently and through network forms. Today the Ministry of Education and Science of the Russian Federation has not developed a Procedure for the organization and implementation of educational activities under higher education program, assuming the network form, yet, but the absence of such a bylaw does not prevent universities to establish this interaction, guided by the general permissions of the federal law.

The network form of educational programs provide students the opportunity to master an educational program using the resources of several organizations engaged in educational activities, including foreign ones, as well as, if necessary, to use the resources of other organizations. Along with educational institutions any scientific and medical organizations, institutions of culture, physical culture and sports and other ones possessing the resources necessary to carry out teaching, training and work practices, and other learning activities provided for the educational program may be engaged in the implementation of educational programs using the network form.

Using the network form of education programs should be based on a contractual obligations between the universities, which will specify the type and level of jointly implemented educational program; procedure for implementing of the academic mobility of students, their admission rules, the distribution of responsibilities between the organizations; documents issued on the results of studying (e.g., issuing "double diploma" by both cooperating organizations); financial issues (offset payment at training of students at a partner institution), etc.

This will allow to expand students' access to modern educational technologies and learning tools, in-depth study of particular disciplines and courses, more efficient allocation of material, technical and teaching resources. So, besides the mutual invitation of leading professors to partner-universities and the academic mobility of students, the

implementation of the concept of the network learning will allow universities to save funds for the creation of digital libraries, more efficient use of human resources in grant applications.

CONCLUSIONS

Currently, in most European countries the process of modernization of national education systems is going on, although some of them (e.g., Belarus) are off to do it. It seems that the discussion of the positive and negative experience in Russia regarding the transition to the Bologna standards can help build models of higher legal education reforming and develop appropriate guidelines for the former Soviet republics.

Despite these serious difficulties, Russia has managed to achieve a lot in the way of implementation of the Bologna Declaration. Many organizational issues related to the transition from the Soviet five-year model of legal education (specialist's programs) to the two-stage system (bachelor's and master's degrees) are solved; the author's concept of master's degree programs in law are introduced in many Russian universities, some Moscow universities established contacts with partner-universities in a number of European countries. Russian universities have done a lot regarding the development of practical training of graduate students. In this sense, the experience of Volgograd Institute of Business is very significant, it does not narrow down the practical training of lawyers to the clarification of technologies how to apply rules of law and advise (which is certainly very important), but it also implements the volunteer programs, consisting in education activities of graduate students in schools.

However, the major trend of the recent years in Russia on the part of political leadership is the negation of human values, unconstructive criticism of the EU and the USA, imposition of authoritarian regimes to Russian society as friendly countries. In these circumstances, it shall be stated that the political leadership of the country does not understand the value of the Bologna Process, which appears in a constant reduction of investment in the human capital.

The full implementation of the Bologna Declaration in Russia requires a complex of economic, political, social and other reforms as a result of which the democratization of public life, observance of human rights and freedoms will be achieved.

In the field of education, it might appear as the increase of freedom and responsibility of higher education institutions, reduction of the corruption and petty control of universities by the Ministry of Education and Science, reduction of the educational process bureaucratization, implementation of the freedom of expression and creativity by professors and students. Higher education can not be as an island - its reform can only be successful due to increasing of the cultural awareness of citizens and public authorities. Increasing the education quality and creating the system of "social lifts" will make it possible to give a strong response to the objective challenges of the XXI century.

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Development of Educational Leadership Skills In A Project Based Data Modeling Course At Zayed University

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ABSTRACT

This study aims to investigate the development of educational leadership skills in a general data modeling education course using the Project Based Learning approach (PBL) at Zayed University, UAE. The research goal was completed first by reviewing the most important educational leadership skills that university students need to have in order to meet career and job challenges and second, by investigating the impact of employing the PBL methodology on students' perception of educational leadership skills, and ultimately on their performance. The research used a class observation method as well as a quantitative survey method that was conducted towards the end of the study period. Findings and results indicated that acquiring educational leadership skills via a PBL approach is highly possible, and positive feedback was recorded as per the students' perception and performance.

Keywords: Educational leadership skills, Project based learning approach, General education courses.

INTRODUCTION

Education is an international/global scale enterprise. According to literature in every country in the world, education is a firmly established component no matter what the social, economic and political directions are. Also, in comparing education, in general, across many countries and societies, it can be observed that the educational provision is characterized by many contrasts that can be attributed to social, economic, ethnic and religious factors. All these factors shape the patterns that are observed in the organization, management and development of the educational system. These factors also make education an appropriate field to develop skills within students, faculty members and administrators' population (Foskett & Lumby, 2003). Regarding different educational systems, further analysis and comparison among different educational systems, and the reasons behind discrepancies between the developed countries' educational system and the Arab educational system, especially at the university level, has led to the argument that human resources, financial support and type of curriculum are behind these great differences in the two systems (Akkari, 2004). Yet, as a teacher & a researcher, I strongly believe that the real reason behind these discrepancies, is the lack of proper educational leadership skills in developing countries' educational systems.

Currently, educators are united around the fact that students in educational institutions need "21st century skills" to be successful in their careers, jobs and lives. Indeed, critical thinking and problem solving as well as other skills, have been components of human progress throughout history (Rotherham & Willingham, 2009). The concept of educational leadership has emerged in recent years, and many business oriented concepts, such as communication and presentation, have found their way into the field of education. From different literature sources, the most important of these educational leadership skills can be identified as being: mission-stating, goal-setting, team working, monitoring and evaluating (Al-Mutawa, 2003; Adair, 2007). Many of these skills have been heavily developed within students' population in the educational domain, in many Western and Eastern countries and very good results have been obtained by educational institutions that have employed them (Trent, 2006)

This work investigates educational leadership skills (mainly goal setting and team working) as being educational components that have to be present, not only within managers and conventional leaders as often referred to from a traditional perspective, but rather within all contributors to the educational system in higher education, namely within the managers' level, the faculty members' level and especially within the students' community. Therefore, this study aims to explore the importance of educational leadership skills in the domain of higher education, and to investigate the development of these skills, within students' population, by using the project based learning approach (PBL), as well as a daily awareness exercise. This exercise was designed to help students understand the objective of the course, the objective of different units of the course and the objective of the course project. This study also aims to investigate how the development of these skills within the students' population may affect their overall academic

performance (grade comparison) and students' involvement (class observation). The work concludes by providing summaries and recommendations for further work in this field of higher education in order to prepare capable and competent graduates who would help in developing their societies, their countries and the region.

In sum, our major goal for this study involved determining:

- Whether PBL approach can be successfully used to develop educational leadership skills within the students' population.

Whether acquiring educational leadership skills will affect students' course achievements.

LITERATURE REVIEW

Nobody argues about the fact that knowledge and skills are what helps institutions and leads countries and societies to develop. (Alldredge, Johnson, & Stoltzfus, 2003) For instance, leadership skills along with other skills (linguistic, communication and technical) were originally business oriented skills, but have been smoothly implemented in the field of education and once implemented, very good results have been obtained as per the performance of educational institutions in many countries (Trent, 2006). Many comparative studies have shown that the concept of developing leadership skills is very relative as it changes from west to east, thus developing educational leadership skills within educational institutions would depend, in a similar way, on many factors such as the culture, the politics and the economy of these countries.

In recognizing that leadership development involves more than just developing individual leaders, has now led to a greater focus on the context in which leadership is developed. In fact, thoughtful and careful considerations about how to best use leadership competencies in various domains have been carried out and programs and curriculum have been developed all over the world. Furthermore, new ways of thinking about the nature of leadership and leadership application have been explored by inspiring ideas and concepts from business-like fields and domains. Recently, effective leadership has been commonly viewed as central to organizational and institutional success and more priority and importance are now placed on leadership development than ever before (Alldredge, Johnson, & Stoltzfus, 2003)

Looking at the educational system in general and that of the university level in specific, many types of educational interactions can be noticed within different institutions. Examples of these interactions are: the interaction between professors and students, administration and professors, administration and students, students and curriculum, and professors and curriculum. (Towards an agenda, 1998) In this work, the focus would be given to curriculum and students, and the study would try to demonstrate how a curriculum (using the PBL approach) can be used as a vehicle for educational leadership skills development (goal setting and team working). This study can also show how students' daily involvement and awareness with educational leadership skills can help them acquire some of these skills and adapt them in their learning styles thus having an impact on their overall academic performance.

Curriculum

Beside administration and professors, university curriculum has been recognized to have a great input and role in the academic environment in educational institutions. Good and well-developed curriculum helps university professors and students to achieve their academic goals and outcomes. Furthermore, the curriculum has been considered to be the real heart of the improvement of education. It is not only a list of topics to be taught to students in educational institutions; it can serve several purposes simultaneously. Indeed, Hicks (2007) has stated that curriculum may be viewed as a powerful tool for the administration and professors in their attempts to develop their own educational institutions, to increase equal access for all students and to raise the quality of teaching and learning. Hicks continues in stating that all of that can be fulfilled by using the curriculum as a channel for skills development.

Also, it is worth noting that to proceed with curriculum development from the traditional approach to the PBL approach, in a leadership environment, it is necessary to understand that a curriculum involves process thinking rather than project thinking. This curriculum development is in general a process that requires expertise and continuous production of new knowledge and skills. In addition, as Joyce (1995) has pointed out, there will always be a need for strong research, potential directions and curriculum models, as well as a systematic assessment and analysis on the implementation of the new curriculum within educational institutions (Joyce & Showers, 1995). Furthermore, for a curriculum that is meant to be adopted in an academic leadership environment, direct copying and transfer of any curriculum types, of any developed educational systems in other countries, would not be successful due to cultural, social, and other differences. A real challenging and relevant academic curriculum could move from one type to another, or can take part of one type and parts of other types. Course outlines and course outcomes should be carefully planned and designed accordingly and tested afterwards.

In addition, when choosing a curriculum that will help developing educational leadership skills, it is always

required to search for interesting experiences, problems and their solutions that may be useful as resources in the ongoing curriculum design and assessment. For instance, in Zayed University, this specific approach was carefully taken into account in the development of general education courses. For example, in “The introduction to environmental sciences” a course that deals with environmental problems, solutions and issues related to the UAE environment were heavily discussed and UAE statistical data were presented and studied. Students’ enthusiasm and involvement during all those discussions were very noticeable and, students showed interest in the course material as various cases and examples were relevant to their society and culture. (Catalog)

Concerning the PBL approach, Boud (1983) has found that it is a curriculum design and a teaching/learning strategy which simultaneously develops higher thinking order, disciplinary knowledge bases and practical skills by placing students in the active role of practitioners (or problem solvers). Students in the PBL approach are confronted with a situation which reflects the real world (Boud, 1985). Project Based Learning (PBL) has been proved to be the most effective approach to lifelong learning and assessment. This academic approach can train students and learners in general, in such characteristics as: enthusiasm, motivation, leadership skills, interpersonal skills and organizational skills. All these skills are very desirable talents in the 21st century both in the education axis, jobs axis and lives of people in general (Johns, 2013). Although the PBL approach has been extensively used in academia all over the world, Yeo (2007) and others have shown that this method interestingly has recently emerged as a tool for the development of leadership skills given the new challenging roles of leaders to act in the fast changing global societies (Yeo, 2007). The basic characteristics of PBL are that it is context based using real life cases, it focuses on thinking skills and reaching goals, it requires integration of interdisciplinary knowledge and can be applied in small groups. Students are driven by a posed real life project and become interested in its different phases. As for the university professor’s role, it is considered as one of support, rather than direction, and facilitating rather than instructing. It is obvious therefore that PBL is a student-centered teaching and instructing approach rather than professor centered teaching.

In conclusion, the fact that UAE is a young country (around 40 years old), and its educational systems and higher education in specific are even younger, there is a high expectation that leadership skills will be overwhelmingly embraced by educators, administrators and researchers to introduce these new educational concepts and procedures within their curriculum and development activities, as well as to utilize and develop known approaches (such as PBL approach) in order to help graduating students with competence, knowledge and educational leadership skills.

Students

At the college and university level, it is worth mentioning that different relations and interactions among all educational components are even stronger and critical as students embrace the world of work within just a few years. In recent years, most leadership training programs especially, those conducted and established in the western world were based on the traditional concept of leadership (Expert Power: Lead from the front, 2012). Within many educational institutions, only a small population of students may have had the chance to acquire leadership skills that they need for their future jobs or to serve their communities. In most universities around the world and in specific in the Arab countries, the development of student leadership skills is not truly seen as part of the academic curriculum, but it is mostly attributed to “extra-curricular” activities. Thus, leadership skills are mostly regarded as part of students’ non-academic activities in clubs and organizations rather than being part of the students’ daily life. (Al-Dabbagh & Assaad, 2010)

In the literature, Caine and Caine (1991) have found that the most effective leadership trainings and programs occur in everyday settings that mainly include the course of learning. These everyday venues can potentially serve as opportunities for leadership skills development for all university students. In this regard, courses in addition to student organizations (student councils and student clubs) contain many good opportunities for developing leadership skills. In fact, if during each semester university students are exposed to educational leadership development exercises, and if these exercises become part of that organization’s ongoing activities, many new leadership skills will be implemented and developed within the students’ population by the time he or she graduates from college. The success would be tremendous if similar strategies are adopted in every class of the university, and in all other universities and institutions of the nation. Wheatley (1999) has explained that these trials of implementing leadership skills within courses will certainly have a great impact on institutions, communities and society’s development.

As a summary, developing leadership skills within the educational field at universities and colleges (That is why they will be called from now on educational leadership skills) is a complicated matter and process. Many components are overlapped and therefore should be taken into consideration. A lot of the focus was directed in previous studies on preparing administrators (Day, 2011) and instructors throughout educational programs and professional development activities (Edwards, Baume, & Webb, 2003). Little work has been used to investigate the curriculum and students, as being educational components that need tremendous improvement and development within educational institutions. The focus of this study, as per educational leadership skills (goal setting and team working), has been directed to the curriculum (PBL approach) and students (awareness exercise).

METHODS

This study was conducted at Zayed University in Dubai, UAE, to analyze the output of developing curriculum using project based learning (PBL) as an implementing channel of educational leadership skills. In parallel, another part of the work took place on a daily basis in the format of an awareness exercise. The study has taken into account Zayed University students' background and their culture. General education students who were simultaneously part of the study consisted of 50 female students in their third and fourth semester. The course used in the study was the "Data modeling" course, and the study took place during the fall semester 2010 in the Dubai campus.

Curriculum. To investigate the development of educational leadership skills via PBL approach, a careful study was carried out using courses offered in Zayed University. The discussed course here is a PBL general education course and the main objective behind using such approach is to develop educational leadership skills (Goal setting and team working) within the undergraduate students' population. The data modeling course is a general education course that is normally delivered through classroom lectures and activities. In this study, the course was redesigned using PBL approach in order to allow students to work on a project throughout the semester.

The course (Data Modeling) is, originally, designed to provide Zayed University students with a broad general education in quantitative reasoning and critical thinking. It also provides a foundation for the development of their ability to function competently and confidently in major programs. The course is focused on analytical reasoning and thinking to solve real world problems in business, finance, economics, computer science, education and the natural sciences. The content of the course is delivered through classroom activities to introduce the students to the various topics. For some topics or case studies, data can be from primary sources connected with other courses, such as Environmental Science, Health Science and other general education courses. In each area, knowledge, analytical skills, critical thinking and understanding are developed using relevant examples for discussion, analysis and interpretation in class with follow up exercises or assignments of a similar nature to be done individually or in groups outside the classroom. To be able to take this course, students should have suitable mathematics placement test results. The course emphasis is on applications of quantitative reasoning in the context of real world cases that are mostly related to the UAE. Using the knowledge and skills learned and discussed in the classroom, students were provided with a course project early in the semester and the students were introduced to the approach of PBL. The rationale behind using this approach to learning is that real-world cases tend generally to capture students' interest and enhance serious thinking as the students acquire and apply new knowledge in a project based learning context.

This data modeling project had three different sets of data and students needed first to complete these sets by collecting primary data using either data collection or surveys. Afterwards, students needed to model all the data and make sense out of it by using some or all knowledge and skills learned in classroom activities. Students needed to organize the data, to use mathematical and logical functions, to create graphs and scatter plots, to use statistics, data descriptors and histograms as well as to conduct data analysis. All that was performed by using an open-ended method in which students and their groups could choose different concepts and skills as long as their work is clear, the analysis is correct and the conclusion is relevant. Students needed to work in groups, and therefore get involved in project group planning. Results, discussions and project challenges were looked at inside and outside the classroom on a regular basis (At least one time per week).

The two main educational leadership skills that were developed using this PBL data modeling course were: goal setting and team working. During the semester, students were encouraged to work on their open-ended data modeling project inside and outside classrooms. Necessary skills and knowledge were provided via realistic activities that are applicable to students' experiences. Students also had the opportunity to stay focused and appreciate the fact that there is a course in goal setting and a goal behind acquiring certain knowledge and skills which helps them in working on the project. Furthermore, students were divided into small groups of two to three members and therefore have worked as a team or divided the project duties among group members. This working methodology has helped students share knowledge, skills and raised further issues to be solved. Thus, all of those experiences and assessments would help PBL students to develop their team's working skills and would help them be engaged in a long active learning environment.

Students. In a trial to reinforce the acquisition of educational leadership skills within Zayed University students' population, an awareness exercise was launched in the data modeling general education course. The aim behind conducting this part of the work (awareness exercise) is basically to help Zayed University undergraduate students focus on one or two educational leadership skills (goal setting), be aware of it and have the chance to exercise it on a daily basis pattern.

An example of how the course objective and units' specific objective were discussed is illustrated in the flow chart below (as per the data modeling course). This educational leadership skill exercise was launched at the beginning of each class and has served as a tool for students to stay focused on the actual unit's material and link it to

the course material and the project work. It is also meant to help students have a clear vision of the goal and the objective behind studying a specific unit and how does it converge to the course’s outcomes in specific and Zayed University learning outcomes in general.

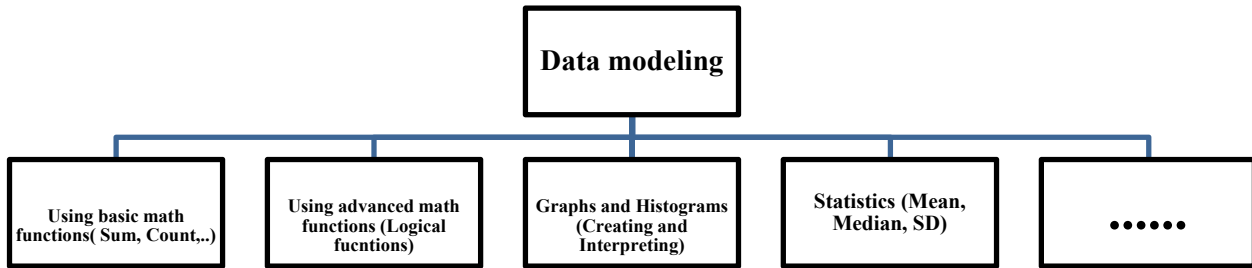


Figure 1: Example of flow chart used to illustrate course and unit objectives on a daily basis (Awareness exercise).

Furthermore, and in order to better quantify the educational leadership skills development impact on students in the data modeling course, a daily observation was carried out and numbers of students with educational leadership skills or no educational leadership skills were recorded throughout the 2010 fall semester. Three categories were set as per educational leadership skills. The first category showed students who are believed to have educational leadership skills (goal setting and team working). These students showed immediate and a spontaneous start in their project work during the allocated time inside the class. The second category of students showed some interest and is believed to have at least one of the educational leadership skills (goal setting or team working). This second category normally took longer to start working, but students spent most of their allocated time working on their project. The last category presented students who had no educational leadership skills. These students lost all the allocated time and were either talking or doing something else other than working on their project. The aim behind this observational part of the study was to investigate the relationship between the trial of developing educational leadership skills and students’ attitude. This simple observational exercise may give a good indication of how implementing educational leadership skills (via PBL) can affect students and their attitudes toward the course material and the project work and ultimately their performance. The observational exercise was launched at the beginning of the semester and each time the class meets for project work, numbers of students were recorded. At the conclusion of the observational exercise, the monthly average of students’ number was calculated as per the three categories. The data based on the observational part of the study were compared and only the first and the last monthly averages were presented.

To evaluate the impact of developing educational leadership skills within the population of Zayed University students, a grade comparison was conducted for the data modeling course students who were part of the study. For this reason, sections of the same general education course were investigated, and students’ grades were compared. Grade percentages for this course were divided among: Test1, Test2, Project and Final.

In order to further investigate the impact the developing educational leadership skills within the population of students had, a survey was administered for the “Data modeling” course students toward the end of the 2010 fall semester. The aim of the survey was explained to the students and then they were given flexible time outside the class to answer survey questions.

The figure below illustrates different components and steps of the study conducted at the Dubai campus of Zayed University for female students at the general education level (Prior to their majors).

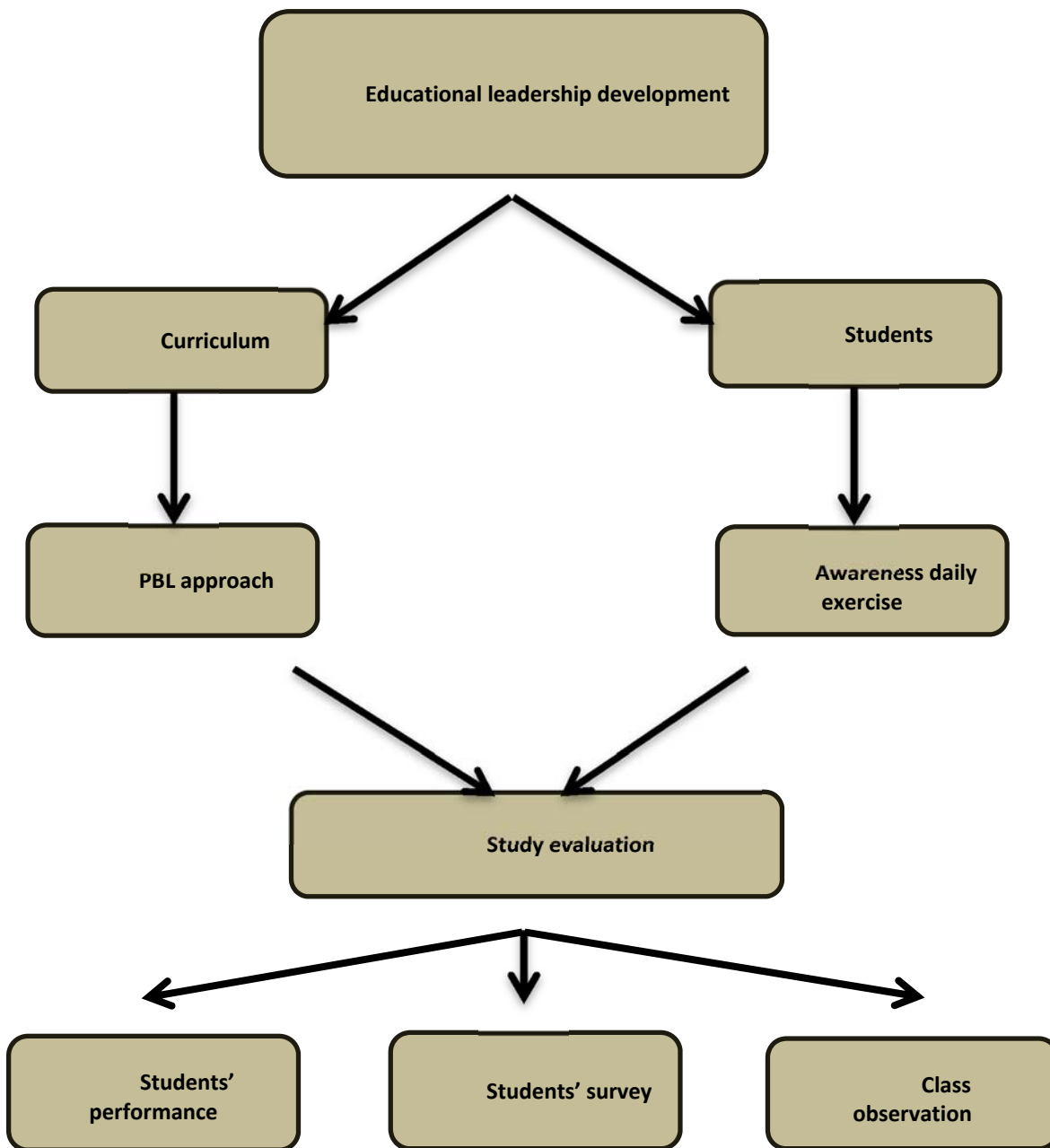


Figure 2: A summary of the educational leadership skills' development study conducted at Zayed University in Dubai, UAE.

LIMITATIONS OF THE STUDY

Leadership skills have been known to hold a great importance in determining the success of students in their career (Lahkim & Draganova, 2011). Nevertheless, resistance to the new approach from both the professors' side and the students' side along with the lack of awareness of the importance of these skills could be a challenge in the trial of developing these leadership skills within the educational institutions. Another major challenge to applying PBL concepts in general education courses is that there are many sections (around 50 sections per fall semester for the data modeling course) and an average of 20-30 students per section. Also, language skills, varied backgrounds, attitudes toward teaching could be taken as challenges and limitations of developing educational leadership skills within institutions. In an effort to maintain quality teaching in all sections, general course outcomes were specified and general assessments was applied, yet all that limits the flexibility and openness of the PBL nature.

RESULTS AND DISCUSSION

Developing educational leadership skills within students’ population in Zayed University was hoped to have a positive impact on the students’ performances. For this reason, a grade comparison was carried out within sections of the same general education course and students’ grades were compared. The figure below shows an example of grades’ comparison between Test1 taken at the beginning of the semester and Test2 taken toward the end of the semester. The comparison was conducted as per individual students’ grades. (22 students from one section of the data modeling course)

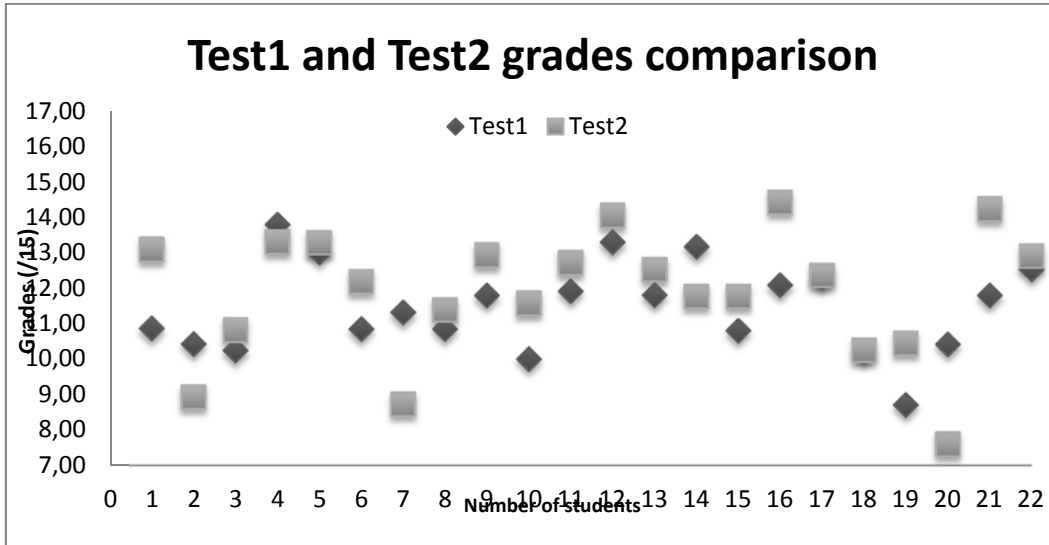


Figure 3: Example of the data modeling course grade comparison as per individual students.

The grades comparison launched for the data modeling general education course during the same semester, has shown that most of the students have performed better toward the end of the semester (Test2) as compared to their performance at the beginning of the semester (Test1). The grades were looked at per individual students, and overall, a positive change has been noticed while comparing Test1 grade for each student to Test2 grade. The class average was calculated for both tests, and was found to change from 76% to 79% (with a standard deviation of 1.26 and a range of 5.08 for Test1 and a standard deviation of 1.81 and a range of 6.84 for Test2). Therefore, it is believed that developing educational leadership skills within the students’ community has played a great role in helping students staying focused, learning better and therefore getting better grades. The grades’ comparison has shown that more than 77% of students had performed better toward the end of the semester.

To study further the impact of developing educational leadership skills via the PBL approach, a survey was administered for the “Data modeling” course students toward the end of the semester. The following charts present students’ perception and attitude toward the course project (PBL approach) and how the project has helped them acquire certain skills. (Educational leadership skills)

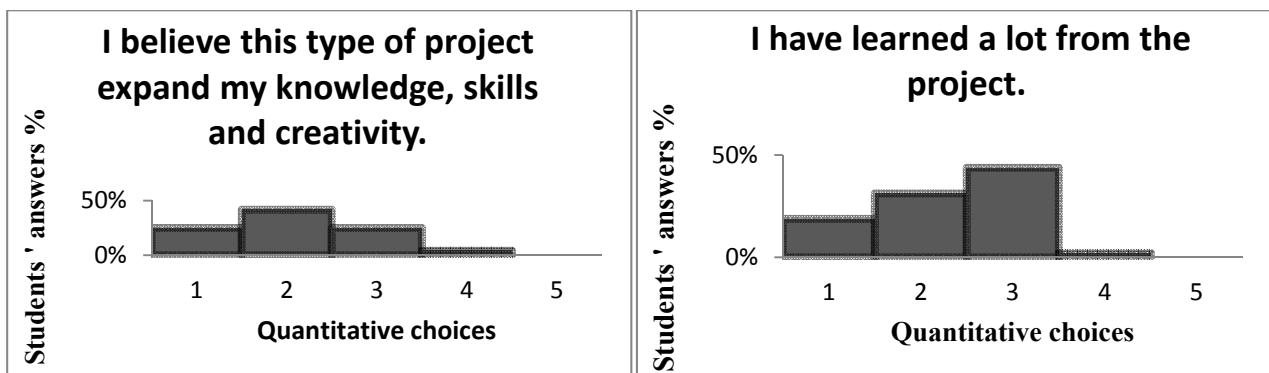


Figure 4 and Figure 5: Statistics of educational leadership skills perceived by 2010 ZU undergraduate students. (1,2,3,4,5) were converted respectively from (Strongly agree, Agree, Neutral, Disagree, Strongly disagree).

The aim behind using the project based approach in the above general education course was to enhance the quality of student learning compared with other traditional instructional methods. After all, the PBL approach was a vehicle to develop educational leadership skills (namely: goal setting and team working) within the community of students. Thus, evaluating the students’ perception toward the PBL approach is an indirect way to evaluate students’ perception toward educational leadership skills acquisition.

Survey results have shown that, students’ perception toward this style of learning was mostly positive. A good percent of students have liked the project and believed to have learned a lot from it. Another percentage of students (a minority) were either neutral or they disagreed about the project concept. Also, more than 60% of students believed that the project has helped them acquire knowledge and skills. This study has suggested that educational approaches such as PBL can certainly improve students’ learning and students’ attitude toward acquiring educational leadership skills that were embedded within the PBL approach. The data has also shown that more effort still needs to be directed to curriculum development, and that most, if not all, general education courses in Zayed University should be developed toward the PBL approach or similar academic methodologies.

In addition to conducting a survey and asking students for their feedback as per the project and how it helps them to acquire educational leadership skills, other questions were used to investigate the students’ acquisition of the discussed educational leadership skills in the coursework (goal setting). The answers have shown an interesting trend. A good percentage (around 70%) of the students’ population has shown great appreciation of identifying course objective and the continuous emphasis on its importance. The following figures show data presentation for a few selected questions of the survey:

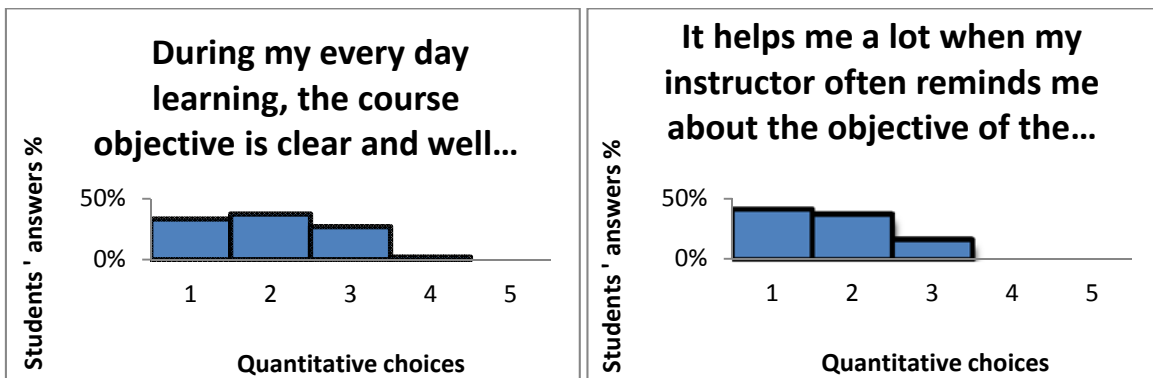


Figure 6 and Figure 7: Statistics of educational leadership skills awareness perception (goal setting). (1,2,3,4,5) were converted respectively from (Strongly agree, Agree, Neutral, Disagree, Strongly disagree).

The above figures show that, in general, students have a positive attitude toward educational leadership skills awareness (goal setting). The results are very encouraging and they are showing very good students’ perception of an important educational leadership skill and its importance to students’ learning throughout the semester. Other questions of the survey have shown that the majority of students have found that focusing on the objective of the course and other specific objectives help them understand better and perform better in the classroom. Most of the students believed that it will help them a lot if other instructors reminded them about their respective course’s objective.

Finally, to further evaluate the impact of developing educational leadership skills via the PBL approach, the class observation, conducted throughout the 2010 fall semester, has shown a positive increase in students’ involvement with the course’s material, as well as a change in students’ behavior in acquiring knowledge. As the semester went on, students have seemed to be more involved with the course’s material. They have come up with many questions raised while working on their project. They have looked more enthusiastic about learning and finding solutions to problems. Furthermore, it was noticed that the team’s working skill had been improved with time. At first, students shared their concerns about how to take different responsibilities while working on the project. But, over time, many challenges were overcome and students seemed to appreciate the concept of working in groups. These attitudes were certainly related to the PBL approach and the rationale behind using it as a vehicle to implement educational leadership skills within Zayed University student’s population.

Figures below illustrate how students’ behavior and attitude have changed throughout the semester. Indeed, the average number of students with educational leadership skills recorded toward the end of the semester has increased compared to the same number recorded at the beginning of the same semester. The same pattern was recorded for students with some educational leadership skills. Those students who have shown some interest in the project have seemed to increase in numbers at the end of the semester. This positive change as per the number of students who have shown more involvement and who have seemed to change their behavior toward the course and the project is most probably related to the development of educational leadership skills throughout the PBL approach within students’ population of the data modeling course.

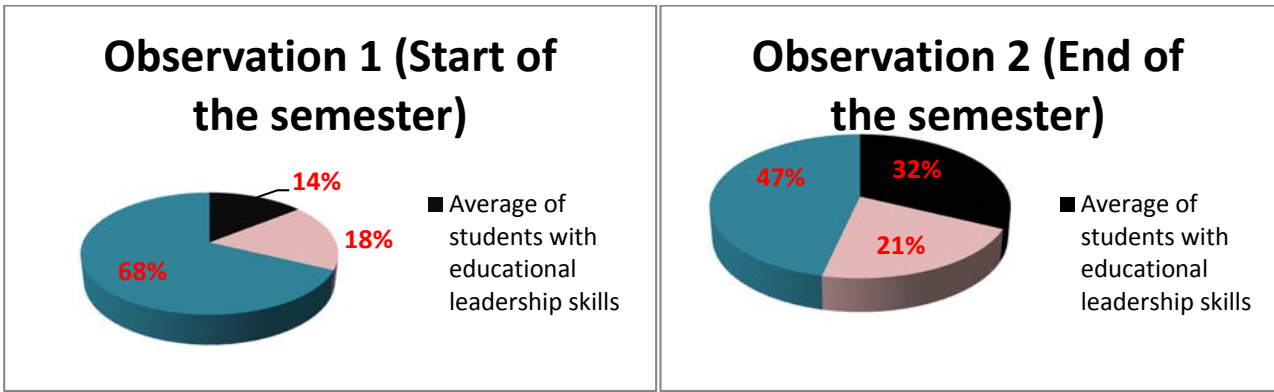


Figure 8 and Figure 9. Statistics of educational leadership skills development using the class observation.

The above class observation results show clearly that developing educational leadership skills within the data modeling course was fairly positive. The percent of students with educational leadership skills has increased with time. Indeed, at the beginning of the semester an average of around 14% of students has shown some indication of goal setting (objective) and readiness for team working. As the semester evolves, more students were falling into this group and towards the end of the semester, an average of around 32% of students was believed to acquire some educational leadership skills. The results have also shown that a lot of effort and work are still to be directed to students, as the number of students who have shown almost no involvement with the material of the course (Project) and were not interested is still high (47% toward the end of the semester).

As a summary, this example of courses that are offered at Zayed University is a really good case where students can acquire and develop educational leadership skills. The concepts embedded in this project have certainly helped many students acquire educational leadership skills (goal setting and team working) and helped them to better model their thinking and enhance their learning, and ultimately improve their academic performance.

CONCLUSIONS AND RECOMMENDATIONS

In Conclusion, the entire study conducted in Zayed University within a general education students’ population, has found that the development of educational leadership skills is highly effective and most positive. Indeed, these skills have proven to help students improve their learning skills as well as their performances both via approaches such as PLB and via a daily classroom awareness exercise. Educational leadership skills can therefore be vital parameters to improve education, and when these skills become integral parts of the instructional process, the benefits for students, professors and institutions will be tremendous.

Nevertheless, the process of developing educational leadership skills can face various challenges, such as the nature of general educational courses (high number of sections and students, core curriculum, assessment, number of professors), students’ resistance and ignorance of the learning concept as well as the lack of specific training needed for instructors. Therefore, at Zayed University, a lot of work and effort should still be directed to curriculum development, to application of new educational approaches, to students’ educational leadership awareness, and to educational leadership workshops.

Also, in addition to curriculum and students; professors and administrators should also be part of the educational leadership development experiment. Thus, establishing a synchronized medium and creating a leadership environment within the educational institution would without a doubt positively affect the performance of students, professors and administrators. Therefore, ongoing leadership workshops, ongoing curriculum development and ongoing educational leadership research should be part of Zayed University priorities in order to raise the level of education. Furthermore, developing educational leadership skills through courses and classroom activities should be in conjunction with outside clubs, extra curriculum activities etc to accelerate improving students’ recruitment, training, evaluation and ongoing developments. Implementing such outside of classroom activities should be considered highly cost effective approaches to successful students’ improvements. These efforts will be increasingly important for university students as those practices converge into establishing a new education system, improving its overall quality and substantially adding value to students’ learning.

In addition to applying non classical pedagogical ways of instructing such as project based learning (PBL) and problem solving, and direct incorporation of a few of the educational leadership skills within the university courses. Special courses could be designed to help developing these skills within the student population at the university level. For instance, one leadership course could be incorporated each semester for students during their general education period or prior to entering the general education university level. These courses could develop educational leadership skills and emphasize their importance in the education field and the job market. For instance, themes related to

students' culture, background and environment could be recommended for each course and within the university course outlines.

To conclude, in Zayed University, much work is still needed at the level of curriculum development, students' readiness (educational leadership skills), professor's competence and administrative cooperation. Further research is planned at the university to increase the educational leadership skills' development within the university student population, and using other courses. Also, further research would be conducted on curriculum development, professor and administrators' involvement in the domain of educational leadership skills' development. All of that is hoped to help developing education in Zayed University and in the UAE.

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Adapting to Global Trends: Why and How Is the Ethiopian Higher Education Changing?

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ABSTRACT

In the decades since the end of the Second World War visible similarities have been emerging between higher education systems of different countries, across varying economic, political and socio cultural contexts. Over these years the Ethiopian higher education has also gone through a series of changes influenced by systems of different countries and global trends in higher education. Using institutional isomorphism as analytical framework, this paper explores how the Ethiopian higher education has been changing in the past two decades. Identifying the main forces of change behind the major policy reforms and examining the modes of influence the paper shows how the Ethiopian higher education adapts to global trends. It also makes the case that being under the influence of numerous interests the Ethiopian higher education shies away from strongly demonstrating distinct features of its own.

Keywords: higher education, isomorphism, policy convergence, Ethiopia, global trends in education

INTRODUCTION

Education in general, higher education in particular, is one of the areas where globalization has its pressing effect. Since the end of World War II education systems in different parts of the world –developed and developing, democratic and undemocratic alike - have shown similar trends of growth, though at different pace. Countries enacted education laws and established government agencies responsible for coordinating education; national curricula grew more and more alike in content and structure; and common justifications explained the trends from the earlier conception of ‘education for development’ to the most recent ‘education as human right’ (Ramirez, 2006). The whole of Africa has been following these global trends in its developmental endeavors, including in [higher] education. Scholars have observed this development as ‘strange’ in natural patterns. ‘Education systems in Sub-Saharan Africa, for instance, seemed surprisingly like those of Western societies despite stark differences in the labor markets they served. Schools and curricula looked like resource-poor imitations of those in the West, rather than functional systems adapted to the educational needs of agricultural economies. It appeared strange needs and realities’ (Schofer et al, 2012 p.58).

These growing similarities and the dominance of ‘global’ trends are explained from different perspectives. The resource dependency theory observes that growing similarities are caused by the instinct to survive. Organizations (in this case systems) with less resource control are likely to abide to the demands of, and copy the behavior of the dominant organization (system) that is the source of their needed resources (Nienhüser, 2008). The fact that the developing countries are mainly resource dependent on the West, in the forms of aid and loan, explains why the earlier will have to follow the directions of the later. The world society theory, on the other hand, holds that similarities across societies could be explained as conformity to dominant, legitimated, or ‘taken-for-granted’ views. Conventional ideas about governance and education could be seen as cultural models – that is, blueprints or recipes that define what is ‘normal’ or ‘appropriate’ (Meyer et al, 1997). Another alternative is to explain the same phenomena using the concept of policy transfer which emphasizes that as a collective result of different interactions between systems and their respective actors, policy concepts and practices get to widen their coverage. The manners of transfer may vary from a coercive learning where the copying country (system) has no other viable option, to voluntary learning, where countries deliberately choose to get advantage of the experience and successful achievement of others (Dolowitz & Marsh, 1996).

This paper, though, relies on the theory of institutional isomorphism (at a global scale) which holds the view that organizations tend to become more homogeneous because of the relentless change they undergo to adapt to their environment; and that the change mainly takes place through three different mechanisms: coercive, mimetic and normative (Dimaggio & Powell, 1983). This theory appears more suited than others to explain why and how the Ethiopian higher education system is changing because it addresses the voluntary as well as involuntary changes the

Ethiopian higher education (the 'institution') had to go through to adjust itself to the various influences of its environment (the world). It helps to explain the nature of relationship the Ethiopian Higher Education has with the general patterns of development in the sector in the contemporary world. It further gives an insight about what the relationship looks like between a developing country such as Ethiopia and the major actors of Higher Education in the third world particularly donors and international organizations.

The Ethiopian higher education in its modern and secular context has a history of a little more than sixty years. Prior to the 1990s the education system was small in size, largely influenced by the socialist system and quite dormant especially at the tertiary level. Following the 1991 change of regime and the overall shift of policies in all aspects, in 1994, a comprehensive education and training policy was issued. Since then series of major reforms have taken place particularly in the higher education sector.

The reform process is complex in that it covered a wide range of issues and involved both internal and external actors. Besides drawing on the experiences of a number of countries and systems, it was influenced by donor countries' agencies, bilateral and multilateral development agencies, international organizations, consultants and higher education institutions of different countries.

Nonetheless, there is a critically limited research explaining the nature of these reforms. This paper, therefore, drawing on literature review and document analysis as its source of evidence, explains why and how these reforms took place. Examining available researches, academic articles, and official documents of the government of Ethiopia and its agencies, the World Bank, UNESCO and other organizations, and using institutional isomorphism as an analytical framework, the paper elaborates what forces (ideals) direct the reform process, who the instrumental actors are, what methods (modes) of influence they use and why Ethiopia is in that position of being influenced. It has to be noted that this study is limited to secondary sources of information and an in-depth research that uses primary data is necessary to give a first-hand account of the reform process and to draw clear picture of the undocumented context and the actual decision making process thereof.

ANALYTICAL FRAMEWORK: ISOMORPHISM IN EDUCATION

Drawing on previous works that studied behavior of organizations and how they respond to environmental demands, Dimaggio and Powell (1983) emphasize on the homogenization, than diversification, of organizations. The underlining concept is that isomorphism forces individual organizations in a certain 'population' to adapt to environmental changes, and, by creating a pattern, results in the resemblance of one another. Adopting the changes and following the patterns is not only a response in pursuit of greater efficiency, but it is also a means of legitimization by the environment. In fact an organization is the unit of analysis used in the theory. However the concept is transferable to explain the manner in which systems of higher education (and others) are changing in response to their respective environment.

Education has long been held as one of the idiosyncratic expression of sovereignty and external interference is strongly resisted. However, owing to the emergence of globalization, influence of international organizations and multinational companies, and the shift to knowledge based economy at the global scale; higher education has experienced a substantial degree of global integration. Schofer et al (2012 p.59) note that

'...variations coexist with clear patterns and trends, such as common assumptions, rules, and fads. Ideas and discourses regarding educational policy institutionalized in the international sphere, for example, may vary on specifics yet embody broadly common assumptions that pervade a given historical period – providing common blueprints that generate conformity among countries.'

They further assert that empirical researches suggest the top-down diffusion of global models particularly in those countries with strong organizational links to the international sphere.

This process of isomorphic changes, according to Dimaggio and Powell (1983 p. 150-152), comes in three different forms: the coercive, mimetic and normative. Coercive changes are result of direct and indirect influences and pressures from the powerful actors. In the case of Ethiopian higher education bilateral and multilateral organizations, international non-governmental organizations and donor groups are among the major sources of such influence. Mimetic changes happen when countries deliberately copy (or draw lessons) from the experiences of other countries that are regarded as successful in their policies. Having such a small higher education system lagging behind the world in many ways Ethiopia had to learn from the successful experiences and moves by other countries. The normative process of change stems from professionalization. Professional services that come in a form of consultancy and technical assistance, and the increase in the number of professionally trained employees in its institutions, are the most visible ones in shaping changes in the Ethiopian higher education. These three mechanisms are used to analyze how the major changes in Ethiopian higher education system took shape.

HIGHER EDUCATION REFORMS IN ETHIOPIA

In recognition of the multiple challenges the Ethiopian higher education system suffered, and its low status even by Sub Saharan Africa (SSA) standard, a series of reform initiatives was launched in the 1990s. The initiatives were mainly efforts to realign the system in order to contribute more directly to the country's strategy for rapid economic growth and poverty alleviation, which appears to be consistent with the 'knowledge- based economy' notion of the world. While there are a number of activities undertaken, in the past two decades, under the general umbrella of the reform agenda, the following are the principal areas of change.

a) Privatization

After moving out of a command economy in early 1990s, privatization was the first major change that happened in the Ethiopian higher education. Though criticized for various shortcomings, the privatization has achieved a considerable result, at least in quantifiable measures. Opened up for private investment in the mid-1990s, the number of accredited private HEIs with undergraduate and above programs, grew from none to 44 by the 2009/2010 academic year, enrolling about 18 per cent of the total student body (Ministry of Education, 2011).

b) Massive expansion

Another typical character of the Ethiopian higher education for the past fifteen years is the massive expansion underway. The expansion in the tertiary level, in recent years, is significant. The amount of investment in the massification of higher education is estimated to have reached as high as 4.2 per cent of the gross domestic product (GDP) (Ashcroft, 2010). The Ministry of Education (MOE) launched five new universities by the turn of the century (by upgrading junior level institutions) marking the beginning of this aggressive massification program. By the year 2014/15 Ethiopia will have 33 full-fledged universities compared to only two by the end of the 1990s. Total enrolment has increased from 42,132 in 1996/97 to 192,165 in 2004/05 (MOE, 2005) quadrupling in less than a decade. The annual enrolment growth rate of 50.86 per cent was possibly the highest in the world during this period (Waweru & Abate, 2011). It further reached 319,217 in 2010/11 and is targeted at 467,445 by 2014/15 (MOE, 2010).

c) Cost sharing

Cost-sharing (user fees) was introduced as part of the plan to reduce public spending on higher education and maximize resource utilization. It is assumed that higher rates of taxation to support students out of public funds impair economic efficiency, and hence the alternative is to let individual students pay directly for a service they receive. Upon persistent recommendation of the World Bank throughout the 1990s, the government of Ethiopia introduced user fees in a form of cost sharing scheme in public HEIs in 2003, and subsequently a regulation (No. 91/2003) was provided by the Council of Ministers for its implementation. The Higher Education Proclamation (first ratified in 2003 as No.351/2003; revised in 2009 as No.650/2009), provides that any Ethiopian student studying in a public institution and who is not required to pay in advance tuition fee shall contribute, in cash or in service, to cover the cost of his education. In the new user fees scheme, students in public universities enter an obligation to share the cost of their study, to be paid back in the form of service or graduate tax from future earnings.

d) Financial Relations with the Government

Besides cost sharing, income generation (and diversification of the sources) is another option for public universities to reduce their dependence on government funding. The major change, in this regard, came after the recommendation of the World Bank (2003) citing the good examples of Addis Ababa College of Commerce and the agricultural colleges at Hawassa and Jimma Universities. Consequently, the government has demanded public universities to gradually move away from public funding through mobilizing resources for themselves in different ways, for example, marketizing their research and advisory services and establishing for-profit enterprises. This is evidenced by the provisions of the 2003 higher education proclamation, and later in the 2009 one. Similarly income generation is addressed as an area that requires further improvement both in the third and fourth Education Sector Development Programs [ESDP] (MOE, 2005, 2010). ESDP IV puts it as a target that by 2015 the number of universities that generate sufficient income will be 22 (MOE, 2010 p. 64), though it fails to describe what 'sufficient' means.

Concurrently, the method of public funding was also changed to the block grant format. In accordance with the recommendation of the World Bank's higher education research team in Ethiopia (World Bank, 2003), the higher education Proclamation provides that 'every public institution shall receive a block grant-budget, agreed upon in advance as indicative budget for a five-year period; provided however, that such block-grant budget shall be revised annually' (Article 62.2). This provision, granting the institutions more financial autonomy, also provides them the opportunity to make investments in profit generating activities in support of their income generation endeavor. Yet, it is important to note that the practical application of this provision could not come to effect for the reason that the universities do not have sufficient capacity.

e) Autonomy

The higher education proclamation No.650 (FDRE, 2009) stipulates autonomous, self-managing HEIs that are governed by a board where by administrative and financial autonomy of institutions is balanced by the block grant budgeting system. The World Bank recommends the need for effectively coupling the autonomy of HEIs with an appropriate set of accountability mechanisms such as the use of funding formula in allocating block grants for public universities, and institutionalizing quality assurance both at institution and national levels (World Bank, 2003). By way of accountability and quality assurance, the government seeks to monitor such crucial concerns as access, equity, quality and relevance, and efficient use of resources in public HEIs. In this regard, the government steers public HEIs using regulatory frameworks (e.g., the Proclamation, and Strategic Plan Agreement) and system oversight agencies such as the Higher Education Relevance and Quality Agency (HERQA) and Higher Education Strategic Centre (HESC).

f) Strategic Prioritization

The development of the ESDP has marked the introduction of strategy led approach to education development in general. The findings of the 1995 and 96 conferences on higher education identified, among other things, lack of clearly defined vision and mission to be the primary problem of the sector (MOE, 1997). This coupled with the recommendation of donors (especially the World Bank) led to the establishment of HESC in 2003. According to the establishing proclamation, the centre has the overall objective of ‘...formulating vision and strategy in order to make higher education compatible with the country’s manpower needs as well as with appropriate policies and with due consideration to global situations to advise the Government on such matters’ (FDRE, 2003 Art 86). Consequently all universities were required to develop a strategy of their own which falls within the overall development goals of the country and that of the sector in particular. Later in 2010 the country came up with a brand new blanket development plan called the Growth and Transformation Plan (GTP) which required the renewal of the missions and strategies of all public institutions to be aligned with the GTP targets.

g) Quality Assurance

Reforming higher education to ensure its quality and relevance has been another focus in aligning the subsystem with economic productivity. The World Bank attributes lack of relevance and poor quality of higher education in SSA in general (World Bank, 2009) and in Ethiopia in particular (World Bank, 2003) to lack of qualified staff, out-dated curriculum, and declining spending and subsequent poor physical facilities (including library and laboratory services). As part of the reform process, in line with the Bank’s recommendations, Molla (2012) notes that, the government of Ethiopia has been able to review and update university curricula; introduce new programs in areas of computer science, agriculture, engineering and other science fields; expand graduate level programs; improve pedagogical competence of university teachers through professional development programs; and institutionalize the Higher Education Relevance and Quality Agency (HERQA) and the National Pedagogical Resource Centre (NPRC) to ensure the relevance and quality of education and training in HEIs.

In addition to those mentioned above the reforms also focused on issues of access, equity and gender balancing. The ministry developed a strategy that focused on increasing the participation level of women both at undergraduate and graduate levels. Similarly the ESPD IV considered the goal of increasing the number of women in academic and top management positions through affirmative action – setting a target of 20 per cent of academic staff and 16 women in top leadership by 2015 (MOE, 2010 p. 64). Hence, a women scholarship for graduate studies has been set up since 2010. The ministry has also launched ICT capacity building program including ICT programs in all universities and the launch of IT graduate and doctoral programs at Addis Ababa University, which will culminate finally by developing a sector wide network that will connect all institutions and concerned agencies (World Bank, 2003).

THE FORCES OF CHANGE

While the Ethiopian government is the initiator and ultimate owner of all higher education reforms that have taken place, there are different internal and external actors who play significant roles in shaping the form and direction of the reforms. Besides the development of the 1994 education and training policy by local experts, Yizengaw (2005) also claims that the initial stages of the reform process, particularly the landmark conferences of the 1995 and 1996, were inclusive of all relevant local stakeholders. In addition to the directly concerned government offices and institutions, representatives of industries and the private sector, community leaders, independent experts, and notable individuals are said to have taken part. Similarly, documenting the preparation process of the overarching Education Sector Development Program (ESDP), Martin et al (2000) listed the major local actors that included: departments of the MOE, social and administrative sub-sector of the Prime Minister Office (PMO), Education Bureaus of all the nine regions and the two city administrations, Institute of Curriculum Development and Research (ICDR), Educational Materials Production and Distribution Agency (EMPDA), Educational Media Agency (EMA), and Teacher Education and Staff Development (TESD).

In parallel, the crafting and implementation of all reforms in Ethiopian higher education has entertained considerable involvement and/or influence of external actors as well. Donors and partners involved in the preparation of ESDP are World Bank, European Commission, the UN organizations UNDP, UNESCO and UNICEF, Swedish government through the Swedish International Development Cooperation Agency (SIDA), Africa Development Bank (AfDB), Government of UK through its Department for International Development (DFID), Government of Finland through its Ministry for Foreign Affairs, Government of Germany through German Society for International Cooperation (GIZ then GTZ), Government of Ireland through Irish Aid, Government of Norway through Norwegian Agency for Development and Cooperation (NORAD), Government of Japan through Japan International Cooperation Agency (JICA), Government of Italy through Italian Cooperation, and The Forum for African Women Educationalists (Martin et al, 2000). It was also observed that there was a strong sense of competition among these actors to dictate the overall direction, which finally culminated in the World Bank assuming the role of coordinating the donor side. Later on reforms related to capacity building involved new stakeholders like the government of the Netherlands and Belgium, and their respective institutions (i.e. development agencies, consultants and universities). However it is important to note that the influences of UNESCO and the World Bank on the Ethiopian higher education in general, and on the recent reforms in particular, are of immense magnitude to the extent that it is difficult to think of the reforms without their involvement.

ISOMORPHIC MECHANISMS OF THE CHANGE

Coercive isomorphic change

Yizengaw (2005) suggests that the Ethiopian higher education reform has been considerably influenced by the 1998 UNESCO conference, the 1999 UNDP Human Development Report and the 2000 publication of the joint task force of UNESCO and the World Bank - *Higher Education in Developing Countries: Peril and Promise*. Araia (2004) on his part emphasized on the significant bearing of the 1998 World Conference on Higher Education and its resultant document '*World Declaration and Framework for Priority Action for Change and Development in Higher Education*', by pointing out how the various articles of the declaration have been interpreted in the Ethiopian higher education reform. Ethiopia as a member of the UNESCO and a participant of the conference has made a commitment to the priorities of the declaration. Besides the declaration had such a wide acceptance that disregarding it would entail the lack of conformity with the world.

Another way Ethiopia has been coerced to follow the trends in world higher education was through preconditions of aid. After all, Ethiopia does not have the financial and expert capacity to undertake the reforms all by itself. The development of the ESDP typically involved a number of external stakeholders, mainly donors. Actually, their involvement was too strong to the extent that the Ethiopian government expressed its frustration about too much requirements as a precondition for assistance and excessively detailed technicalities considered 'interference' in what the Ethiopian government takes as an internal matter (Yizengaw, 2005).

In this regard the World Bank has a strong track record of subscribing policies to developing countries as a precondition for loan. In the 1980s and early 90s the Bank, considering rate of return as a basis of analysis, advocated disinvestment of public money in higher education. Rather it pushed for privatization of the sector so that the government could better focus on the primary and secondary education (Molla, 2012; Collins & Rhoads, 2008). During this period the bank used strict conditionality [and policy subscription] as an instrument of influence to direct the development goals of developing countries to be in line with its own development goals (Pender, 2001). By the end of the 90s the bank formally acknowledged the vital role of higher education in development in the era of 'knowledge-based economy'. It also moved to the use of moderate methods of influence such as negotiation, technical assistance, consultancy and publications.

The World Bank has also used an indirect method of influence on the Ethiopian higher education. Over the years the Bank has been viewed as the most essential actor of the development endeavor in the developing world. It has built such a strong reputation and influence on donors and development agencies all over the world that countries desperately try to get the Bank on their side as if a development initiative that is not supported, or at least endorsed, by the Bank is doomed to fail. Therefore countries are forced to design their development plans aligned with that of the Bank's.

As a country largely dependent on aid and loan as well as assistance of foreign experts, legitimacy is a very important factor for Ethiopia. Therefore conforming to the recommendations and directions of international organizations such as UNESCO and the World Bank as well as following the interest of major donors is the unstated obligation Ethiopia would have to fulfill in order to secure credibility for effective implementation of its higher education reforms.

Mimetic isomorphic change

In Ethiopia it is common to hear the government defending the relevance and viability of its policies by referring to the countries from whose success it was copied or from whose experiences it drew. The 1994 education and training policy has benefited from the consultation of expatriate experts who came in to the role through partner governments and multilateral organizations. Besides the direct involvement of foreign experts in the process, donors and development partners were invited to contribute to the reform process through a series of consultation sessions (Yizengaw, 2005). This originates from the belief that involvement of expatriate experts and representatives of donor governments would produce the benefit of drawing from their successful experiences. Very often a team of experts travels abroad, particularly to European countries seeking to learn from the experiences of those countries for designing and implementing reforms. It is also common that Ethiopia asks for technical assistance from different countries, which mostly comes in a form of group of experts helping their Ethiopian counterparts. The Ethiopians would be set in a line of succession through on-the-job training from the expats.

When Ethiopia came out of the socialist rule in 1991, it was faced with multitudes of socio economic problems having a very small and backward education system. The new government formed by the ex- guerrilla fighters, was in the typical situation Dimaggio and Powell (1983) would call ambiguity of goals. Hence the most viable and justified thing to do was to learn from other countries that already have a well established system.

Normative isomorphic change

In the normative mechanism of change come two things: the professionalization of the higher education system and the learning from consultancy services. The demand and supply of skilled labor for the higher education system have never met. Even today Ethiopia has a chronic shortage of professionals in the sector. One of the remedies taken in this regard is hiring expatriates to fill the gap. On the other hand, Ethiopia benefits a lot from government-to-government and open-to-the-world scholarships. Its higher education system is being more and more staffed by Ethiopians educated in Europe and North America, who bring in their skills and experiences from those countries where they were trained.

Often times foreign experts, universities, think tanks and research institutions are hired to assist the government of Ethiopia and its institutions in the higher education reform process. In this regard the World Bank takes the lead. Calling itself 'Knowledge Bank' (2003 p. IV), the World Bank provided consultancy services – undertaking research and providing recommendations on higher education of specific countries. More importantly, it used publication, at a large scale, to set the global agenda on higher education as well as to steer direction in specific countries. Beginning with the 1994 *Higher Education: Lessons of experience*, the Bank has issued a number of general, region-specific and country-specific publications. In addition to project based studies and evaluations, the 2003 comprehensive publication of the Bank, *Higher education for Ethiopia: Pursuing the vision*, has had a tremendous influence on the reforms that followed in the consecutive years. The document identified strategic priority areas and provided practical recommendations on how to improve the sector in each area of priority, the implementation of which the Bank itself was largely involved in.

CONCLUSIONS

The analysis of isomorphic changes of the Ethiopian higher education indicates that the system has been under a continuous influence that comes in different forms. While the Ethiopian higher education has always been changing in a manner it attempts to emulate the system of different countries at different times, the change in the past two decades was by far more visible. After the change of regime in early 1990s Ethiopia opened up itself for market economy and launched its attempt to catch up with the world.

Its reform process is shaped by a number of ways that correspond with the coercive, mimetic and normative mechanisms of isomorphism coined by Dimaggio and Powell. Coercively Ethiopia fell under the influence of the neo liberal ideology through policy subscriptions and conditions for aid and loan. Mimetically it staffed its higher education system by expatriates and foreign educated Ethiopian professionals, and copied from the experiences of other countries. Normatively Ethiopia benefited the consultation of foreign experts, institutions and governments.

However, as much as it benefits, Ethiopia's higher education reform suffers from the confusion of too many interest groups and their respective influences. The desire to secure legitimacy in the eyes of donors and the aspiration of learning from the success of too many countries has led the system in to loss of its own distinctive identity.

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Analyzing Health Education Training of Human Services Students

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ABSTRACT

Human services programs are charged with training students to address social problems through delivering services that enhance the standard of living of all people. The coursework generally offered in accredited human services programs are within the framework of mental health and social work, yet human services workers play a critical role in health care delivery and need to convey good health practices to their clients. This study provided an analysis of accredited program curriculum across the United States, and made the argument for the importance of health education courses for field preparation. The 39 accredited human services programs were analyzed for their number of health education courses offered, the type of course, and the number of credits per course. The analysis revealed that health education courses were present in less than half of the accredited programs. While many of the programs offer one course, First Aid/CPR was the only health education course offered to students.

Keywords: health education, human services, mental health, curriculum, accreditation

INTRODUCTION

Training human services students to care for clients in a variety of areas of their lives is critical at this time because of the governmental focus on health care for all. It is essential that human services students are prepared to understand the health care changes in America as it relates to their professional training.

The intersection between health education and human services is one where similar fundamental theories and schools of thought anchor the fields. Anthropology, sociology and psychology are threaded in the practices found in both fields. When closely examining the definition of human services according to the Council for Standards for Human Services Education as

“uniquely approaching the objective of meeting human needs through an interdisciplinary knowledge base, focusing on prevention as well as remediation of problems, and maintaining a commitment to improving the overall quality of life of service populations. The Human Services profession is one which promotes improved service delivery systems by addressing not only the quality of direct services, but also by seeking to improve accessibility, accountability, and coordination among professionals and agencies in service delivery” (http://www.nationalhumanservices.org/index.php?option=com_content&view=article&id=88)

it indicates that the wellbeing of people is paramount to effective client outcome. Health education provides an understanding of health behaviors and how to work with individuals and groups to modify health practices. Berkman (1996) indicated that social workers are in need of training that will enable them to work with patients and clients with respect to the evolving health care delivery models. Intercolaborative training can lead to improved service delivery across agencies (Littlechild, Smith, & Work, 2012). Such training would empower them to be part of hospital and community health teams that collaborate on patient/client care.

Human services education has continued to evolve to embrace the growing needs of client populations. This evolution has increased to include the health and wellness concerns that impact clients' abilities to access needed services. This change include a need for human services students to better understand the health and wellness concerns of clients, and client ability to actualize their role in society. This ever-changing society involves critical understanding of managed care and being prepared to work in those environments (Berger & Ai, 2000). As the health care system evolves, it is essential that human services professionals remain relevant (Pecukonis, Cornelius, & Parrish, 2003). The key way for the field to remain relevant is by revitalizing the curriculum, but not overwhelming training with courses that may need to be phased out of the curriculum (Vourkelis, Ell, & Padgett, 2001). The development of the Affordable Healthcare Act impacts client care not only from the perspective of human services, but health services

and personal health needs that become community issues. When the training of human services professionals was examined for health education instruction, such courses play little to no role in the curriculum.

The purpose of this study is to provide an analysis of the accredited human services school curriculum across the United States. This study will assess the presence and breadth of health education training for human services students. Finally, this paper will begin the dialogue in making a case for a stronger health education curriculum in the training of human services students.

METHOD

SOPHE-AAHE Baccalaureate Program Approval Committee (SABPAC) of the National Implementation Task Force for Accreditation of Health Education website (<http://www.healthedaccred.org/sabpac.html>) which approves baccalaureate health education programs (n=21) was reviewed to identify the courses that provide health education proficiency. The Council for Standards for Human Services Education (CSHSE) website (<http://www.cshse.org/accredited.html>) lists all accredited human services programs (n=39) in the United States. The next step was to view the curriculum of the accredited human services programs at their school websites. Next, the human services programs that offered health education courses and the programs that offered only human services courses for their programs were documented. Health education courses were identified based on the title of the course and course number, and correlated with similar courses offered at approved SABPAC programs to determine course level as either basic, intermediate or advance. Basic was defined as 100-level courses, intermediate as 200 and 300-level courses, and advance as 400-level courses. Then the number of health education courses and credit hours for those courses offered by the human services programs were noted.

The information was collected in table format, separating human services programs with health education courses from programs without health education courses. For the programs with health education courses, comparisons and contrasts were drawn between number of courses, types of courses. Data triangulations were also conducted between course level, credit hours of courses, number of courses offered, and degree(s) granted by programs.

RESULTS

An examination of the accredited human services programs showed that 41% (n=16) offered health education courses, and 59% (n=23) did not offer any health education courses to their students. Of the 41% that offer courses, 62% offer only one health education course. For those human services programs offering only one health education course, 18% offer only a First Aid/CPR course. This type of course, when examined next to the SABPAC program courses, was a basic entry level course.

The number of health education courses offered by accredited human services programs ranged from one to eight courses (see table 1). There were a total of 30 health education courses offered by accredited human services program. Of those offered, 56% were basic courses, 40% were intermediate, and 3% were advance.

When looking closely at the programs that offered only associate degrees in human services, 81% offer only basic level health education courses. Fifty percent of the programs offering only one health education course were associate degree programs. Of the associate/baccalaureate degree programs, 67% offered only basic courses. One of these programs offered eight health education courses ranging from basic to intermediate. The Baccalaureate/Masters degree program only offered one three-credit course and it was at the basic level.

Table 1. Number, credits and course level of health education courses offered by accredited human services programs.

% of accredited human services programs	Number of health education courses offered/program	Credit hours	Course level(s)
62% (n=10)	1	1-3 credit course	Basic
25% (n=4)	2	2-4.5 credit courses	Basic-Advance
6.25% (n=1)	4	3-4 credit courses	Basic-Intermediate
6.25% (n=1)	8	3 credit courses	Basic-Intermediate

Table 2. Degrees granted by programs.

Associates degree only	69% (n=11)
Associates/Baccalaureate degree	19% (n=3)
Baccalaureate only	6% (n=1)
Baccalaureate/Masters degree	6% (n=1)

DISCUSSION

The analysis of the accredited human services programs revealed that health education courses were not prevalent, and the level of courses offered were primarily basic. A majority of the accredited human services programs offering health education courses were associate degree-granting and were most likely to offer only one course. This indicated that entry-level training of human services students did not provide them with significant exposure to health education and promotion foundations that would enable them to empower clients.

This study indicated early steps to recognizing the importance of human services training to incorporate rigorous health education coursework that would strengthen students' abilities in meet the health services needs of served communities.

CONCLUSION

The aim of this study was to create the dialogue for exploring the integration of health education in human services education. Future steps for this study would include:

- Assessing the interest and desire of accredited human services programs to consider adding health education to their curriculum
- Developing a job benefit analysis that would support the need for human services students to have such courses
- Assessing current human services workers on the role of health education training in their client interactions and interprofessional dynamics with health care workers

These steps would be essential in helping to shape human services curriculum to meet the growing demand for professionals trained to participate in an interdisciplinary approach to patient/client care.

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A critical review of “our work”: re-thinking teachers’ professional identity- issues and challenges

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ABSTRACT

This paper focuses on issues surrounding the professional identity of teachers’ in the teaching profession. It provides insights into various challenges imposed on teachers’ professional identity in the age of globalization and marketisation. A range of concepts and ideas will be examined through the works of the British Sociologist Basil Bernstein on the structuring of knowledge related to occupational identity formation. The first part of the paper highlights the dominant issues that possess a threat to the ‘notion of teacher identity’ that teachers’ had in the ‘golden age’ of teacher control. The second part focuses on the challenges to Bernstein’s identities arising from ‘regionalization’ of knowledge and ‘genericism’, educational reforms and Levi-Strauss’s bricolage. Thirdly, I suggest ways of reconstructing teacher identity in its current discussions through democratic professionalism, employing teacher activist identity and the use of teacher narratives in teaching. Lastly, the author recommends that teachers’ professional identity could be re-built through conservative ‘identity policy’ by re-designing of work environments, organisational structures and ways of thinking about and carrying out teaching.

Keywords: professionalism; professional identity; teacher identity; standards; restructuring; formation; discourse; re-design; narratives; bricolage

INTRODUCTION

Increasing globalization and the emergence of the knowledge economy are calling into question traditional perspectives on the ‘transformational’ capacity of teacher education systems and the concepts of teaching as a profession and the role of teachers’ in the system (Gopinathan, Tan, Ping, Devi, Ramos & Chao, 2008). Innovations in information and communication technologies provide significant opportunities and challenges, leading to educational reforms in most parts of the world. In response to these challenges there is need for stronger competencies for children through high-quality schooling geared by high quality teaching. According to Hooley (2007) teacher quality is critical in preparing students in the ‘new era’ of social and economic changes.

The current changes pose a threat to teacher “autonomy, to the validity of any ethical view of their calling, to their relatively privileged status and economic position, and to the legitimacy of their claims to expertise based on exclusive possession of specialised knowledge” (Becks & Young, 2005, p. 183). Beck and Young (2005) propose that the outcome of these challenges could be achieved through the restructuring of the professional practices, having relative consequences on professionals with regards to their relationship to knowledge, to clients and to the organisational structures within which they work. Hence the ‘new knowledge age’ system requires teachers to re-build their personal and professional knowledge base and to search for ‘new’ professional teacher identity that meets the demands of the 21st century. This paper focuses on the dominant issues of the debate on the professional identity of teachers’, through the cited works of Bernstein on the structuring of knowledge related to occupational identity formation. Bernstein (2000) suggests that identity of professionals’ is centred in a kind of humane relationship to knowledge and the relationship is centred in ‘inwardness’ and ‘inner dedication’ and it is this relationship which is threatened by the tides of globalization, and can be only appropriated through ‘re-contextualizing’ professional/knowledge relationship.

Of fundamental importance is the new concept of knowledge and its relationship to those who create and use it. This paper also looks at the challenges to Bernstein’s theory of identity arising from ‘regionalization’ of knowledge and ‘genericism’, other challenges as educational reforms and Levi Strauss bricolage – teachers’ work as bricolage (Hatton, 1988). Teachers’ have normally failed to confront the ‘issues’ and ‘challenges’ of teaching in reference to their own professional identities, thus failing to develop a strong relationship with their personal/professional knowledge in fulfilling their educative role is seen problematic.

Therefore this paper attempts to suggest ways to re-construct teacher identity through democratic

professionalism and activist teacher identity model (Sachs, 2001) and through the use of teacher 'narratives' in teaching. Teacher narrative emerges from professional practice and reflection which develops in relation to the knowledge of others (Hooley, 2007). This paper supports Bolivar & Domingo's (2006) ideas that teacher identity could be re-built through 'conservative identity policy' through the re-designing of teachers work environment, organisational structures and ways of thinking about and carrying out teaching.

Professionalism Shift

Furlong et al (2001) define the 'notion of professionalism' as the three concepts of knowledge, autonomy and responsibility central to a traditional notion of professionalism, which are often seen as interrelated. It is because professionals face complex and unpredictable situations therefore they need a specialized body of knowledge, and if they are to apply that knowledge, it is argued that they need the autonomy to make their own judgement. Given that they have autonomy it is essential that they act responsibly-collectively they need to develop appropriate professional values (p.150).

Professionalism is seen as a shifting phenomenon and sociologists suggest that a profession is whatever people think it is at any particular point in time (Hanlon, 1998). Sachs (2001) argues that professionalism operates as an occupational strategy, defining entry and negotiating the power and rewards due to expertise and also as an organisational strategy shaping the patterns of power, place and relationships around which organisations are coordinated. The issue of professionalism has created much debate in recent decades, on the changing nature of professional control. It is quite evident that in the advanced industrial nations the position of professionals and the nature of their practice are changing. In the past professions had enjoyed high levels of autonomy and power to secure their positions and knowledge in the society, but as literacy and education becomes widespread questions are raised on the practices of professionals and on the autonomous nature of professions in general.

Teaching profession has been identified as one of the profession's that fail to adopt essential elements of new professionalism. According to Freidson (1994) "professionalism is being reborn in a hierarchical form in which everyday practitioners become subject to the control of professional elites who continue to exercise the considerable technical, administrative and cultural authority that professions' had in the past" (p.9). Professionalism is exposed to threats (Freidson,1994) when policies are used based primarily on manipulating economic incentives in an ideological climate that claims professionals work to be no different from any other kind of economic activity. These policies create conditions for individual competition hence weakens the social network of individuals to create competence and professional standards. This risks destroying the 'social capital' of professionals, since the work done is mainly for the public and not for the individual good. Coleman further explains that (1988, p.107) "reputation cannot arise in an open structure and through collective sanction hence ensuring that trustworthiness cannot be applied". It forms a kind of 'bureaucratic device of control that binds and organises the behaviour of workers through exercise of hierarchical authority by systematic institution of formal rules and standards (Freidson, 1994).

It is worth agreeing with Freidson (1994) in arguing that "if professionalism is to flourish it is essential that practice be infused with a spirit of openness, infused by the conviction that one's decision must be routinely open to inspection and evaluation" (p. 196). Therefore the character of professional work should suggest two basic elements of professionalism, "commitment to practicing a body of knowledge and skills of special values and maintaining a fiduciary relationship with clients" (Freidson, 1994, p.200). Freidson's argument is quite important for the purpose of this paper, because to obtain these two basic elements of professionalism a relatively demanding period of training is required for learning how to perform 'esoteric' and complex work well.

Freidson (1994) argues against Haug's (1973, 1975, 1977) 'deprofessionalization' and 'proletarianization' theses, saying that the monopoly over a specific body of knowledge and skills that professions had enjoyed in the past are diminishing due to effective 'consumer model' of formal education and excess over a body of professional knowledge, making the work of professionals questionable by the consumer. Hence each professional act like a Marxist proletariat selling its labour for wages and stripped out of all control and autonomy over the substance and process of his work. Freidson (1994) provides alternative explanations for Haug's theses using the notion of 'knowledge gap'. He suggests that consumers' can access the specialized and technical information of today and yesterday and become informed and critical consumers. But it becomes highly questionable whether they can effectively play such a role when dealing with today's professionals, whose knowledge and technical competences have continued to expand. Therefore he claims that professions still have monopoly over important segments of formal knowledge that can never be lost, since new knowledge continuously replaces the lost and thus maintains the 'knowledge gap'.

Teachers' Professional Identity

Sachs (2001) describes "professional identity as a set of attributes that are imposed upon the teaching profession either by outsiders or members of the teaching fraternity itself" (p. 153). These attributes are shared and possess values that differentiate them from other groups, acting as 'conservative' in its intent. Identity is viewed as the primary driving force of the network era (Castells, 2000).

I use Mockler & Sachs (2006) in explaining Castells (2000) ideas that the coexistence of a number of different identities for the individual is organised around a 'primary identity' which frames all other identities or roles subscribed to by the individual, so that while the individual may play a number of roles concurrently and internalize each of those roles to the point where each represents an aspect of their identity, their 'primary identity' which is more sustained across time and space than others, provide a frame of reference for each. (See Mockler & Sachs, 2006:2)

The current changes to the teaching profession through uncertainty and continuous educational restructuring of teacher identity draws significant attention towards Basil Bernstein's (2000) 'retrospective' and 'prospective' identities. 'Retrospective identity is formed out of 'narrative' of the past that provides exemplars and criteria for the present and the future, while 'prospective' identity is informed by social movements, they engage with economic and political activity to 'provide for the development of new potentials'. Hence Wenger (1998) describes the process of identity construction as the "reconciliation of 'multimembership' where the individuals come to an understanding of him/her through reconciling various roles and identities to the self and each other" (p. 148).

Sachs (2001) points out that redefining teachers' professional identity will require collective action by teachers' that is industrial, political and professional. "The industrial component comes through the activities of teacher unions and deals with conditions of work, remuneration and social recognition, while at the same time contributing to professional development activities" (p. 154). Teacher identity is dynamic in nature as a result it is open and possesses power. Therefore as a framework in analysing collective identity of teachers' it is important to acknowledge Wenger's (1998) five dimensions of identity in practice. Which are: 1. Identity as negotiated experience; 2. Identity as community membership; 3. Identity as learning trajectory; 4. Identity as nexus of multimembership and 5. Identity in a relation between the local and the global (p.154). Wenger's identity in practice aligns with the notion of action research and also developing morally informed knowledge to gain praxis which is the continuous interplay between doing something and revising our thought about what ought to be done' (see Noffke 1995, p.1).

One can use the above characteristics of identity to reconceptualise the notion of professional identity.

Challenges to Teacher Identity

The second part of the paper turns to look at the challenges imposed on the occupational identity formation of teachers' in an era of increasing marketization and managerialization.

Bernstein Identity Concept

It is important to look at Bernstein's analysis on structuring of knowledge for the formation of occupational identity. In writing about the ideas of the British Sociologist Basil Bernstein on the current political and social pressures on the changes to professionalism, it should be noted that Bernstein with his penetrating sociological imagination perceived more clearly than most that what was pivotal to these changes was a restructuring not merely of the external conditions of academic and professional practice but even more fundamentally of the core element of academic and professional identity.

According to Beck and Young (2005) Bernstein had located the driving force of professional identity as centred on the relationship that practitioners have with knowledge, he calls this a relationship characterised as 'inwardness' and 'inner dedication'. Hooley (2007) pointed out that "Bernstein's analysis suggest that professionals operate within a context that includes not only the external conditions of change, but the internal basis of change and that an awareness of the interrelationship between the two at any particular time determines the nature of professional consciousness, commitment and vigour" (p.51).

Therefore I argue that a failure to establish a strong interrelationship between 'inwardness' and 'inner dedication' opens profound threats towards teacher identity crisis. Beck and Young (2005) identified 'regionalization of knowledge and genericism the 'pedagogic modes' of Bernstein, as obstacles for Bernstein's identity formation. *Regionalization of knowledge* had been a dominant principle for restructuring of higher educational curricula assuming a qualitatively new significance in recent decades (Beck & Young, 2005).

Bernstein (2000) proposed that regions are constructed by recontextualizing 'singulars' into larger units which operates in the intellectual field of disciplines as well as in the field of external practice. Hence 'regionalisation' grew intensively in universities expanding knowledge structures through innovations in technology. Bernstein (2000)

identifies 'regionalization' as a "discursive procedure which threatens pedagogic culture dominated by singulars and raises issues of legitimacy for such culture" (p. 52). Hence Bernstein further explains that change in the reproduction of knowledge structure from 'course base' to 'modular' form facilitates regionalization. I agree with Beck and Young's position that regionalization weakens both the autonomous 'discursive base' and the 'political base' of singulars, enforcing changes in the organizational structures of institutions towards central administrative control.

According to Bernstein (2000) when 'regionalization' of knowledge began to creep into universities in the 1980s a new kind of knowledge structure emerged with it known as '*Genericism*'. This Generic mode is defined as a performance mode by Bernstein. These are necessary features, skills and competencies that are acquired for a task or work. According to Beck and Young (2005) 'genericism' or generic modes are identified across all fields of practices, which is mostly associated with 'lifelong learning'. The regionalization of new forms of knowledge structure and generic skills necessary for a particular field or teaching subject makes it vital to re-build a strong connection between the 'inwardness' and the 'inner dedication' of teachers'. The re-contextualization of professional/knowledge relationship must take place so that new forms of skills and knowledge are learnt that meets the standard demands of new emerging teaching profession.

Under these circumstances it is considered that a vital new ability must be developed- 'trainability', an ability to profit from continuous pedagogic reformations and to cope with the new requirements of 'work' and 'life'. These pedagogic reformations will be based on the acquisition of generic modes which, it is hoped will realise a flexible transferable potential rather than specific performances. (See Bernstein, 2000, p.59)

Educational Reforms

Reforms have an impact upon teachers' identities and because these are both cognitive and emotional, create reactions which are both rational and non-rational. Thus, the way and extent to which reforms are received, adopted, adapted and sustained or not sustained will be influenced by the extent to which they challenge existing identities (Day, 2002, p. 683).

Educational and social problems have been 'individualized' resulting in reforms directly affecting the professional identity of teachers'. Bolivar and Domingo (2006) explain that 'life politics' of teachers must be reconciled with educational policy and that changes cannot be imposed without considering the emotions and professional lives of teachers as the resistance if created may condemn these changes to failure. Educational reforms involve restructuring of teachers' working conditions and in some countries due to social changes; reforms are also a result of students joining secondary schools with different educational demands. Bolivar and Domingo (2006) view these factors destabilizing teachers' professional practice that entails a difficult reconstruction of their identity. The new emerging circumstances of secondary school students challenge traditional models of professionalism and demand for more 'complex' and 'extended' professionalism. The education reforms are a result of what Bernstein calls, the emergence of 'generic modes' in education leading to pedagogic reforms of 'singulars' which demand effective 'trainability' by teachers.

Teachers' are socialized into their professional culture and hold on to the practices, skills and knowledge that they had capitalized through years of transmission of disciplinary knowledge. When these teachers' are faced with current classroom situations with new demands of students on them, teachers' fail to have a positive impact on students with their available knowledge, training techniques and experiences. They begin to feel de-moralized, stressful, threatened and captured into the professional identity crisis. Some teachers may try resistance methods through "strategic redefinitions of professional practice or they develop defence mechanisms to compensate for an increasing lack of control over their situation" (Bolivar & Domingo, 2006, p.344). It makes teachers to readapt their routines to new contexts. All these issues raise significant questions to teachers' personal and imposed identities and how could educational institutions help teachers create a more secure identity in recent times.

The secondary teachers' job has been changed in such a way that the functions of public instruction that characterised secondary school teachers has been modified and broadened to an educational function similar to the one primary school teachers have been carrying out. Unlike other teaching collectives, there is no correspondence between their academic preparation and the conditions of access to the teaching profession and the job they really have to do nowadays. (See Bolivar & Domingo, 2006: 346)

Bolivar and Domingo suggested that teachers' present and future identity has to be internalized therefore a reconstruction becomes necessary, that balances the 'objective' and 'subjective' identity. When this double identification is questioned there is an identity crisis due to the lack of consistency between the two identities. Teachers' past identity needs to be challenged to accommodate, internalize and reconstruct their future identity.

Teachers' Work as Bricolage

I find it useful to explain the concept of bricolage in this paper since it raises significant attention on the nature of teachers work and provide alternatives to address the problem. The concept of bricolage was developed by Levi-Strauss and explained through Hatton (1988) in her writings. Hatton explains bricolage based on Levi-Strauss definition which is linked with two processes "technical plane" associated with material accumulation and bricolage on the "plane of speculation" dealing with general ideas or theory. Understanding the nature of these planes could provide praxiological insights to teachers.

According to Hatton (1988) teachers' work is a bricolage because it has the characteristics of both: technical plane and plane of speculation. The following features are identified by Hatton that represents teachers' work as bricolage:

- (1) Conservatism – teachers work is highly conservative because by necessity teachers stay within existing constraints, through adopting survival strategies to accommodate rather than transcend constraints.
- (2) Limited Creativity – teachers' work involves limited circumstances for creativity due to institutional constraints.
- (3) Repertoire Enlargement – the repertoire of means on which teachers draw is enlarged in a non-principled way, where theory deployed does not generate the practices in question. Teachers culture is held constant and left unquestioned- bricolage.
- (4) Teachers' use of theory – if teachers are bricolage on the intellectual level, they will behave like the prior scientist than the contemporary scientist.
- (5) Devious Means – the use of devious means are exemplified in the introductions of lessons, because the connection between the means employed and the desired ends are not obvious.
- (6) Ad hocism – bricolage on a technical plane, where teachers work may be understand as attempts to get results by developing new structures in a non-principled way. (p. 342-343)

Hatton (1988) provides further explanations to the features of bricolage by identifying the following issues:

- (a) Anticipatory socialisation – what teachers learn about teaching is intuitive and imitative than explicit and analytical. This forms an invisible barrier to the use of abstract theory.
- (b) Pre-service experience – the practicum experiences of student teachers' focuses mainly on the techniques of teaching rather than towards specific educational purpose, hence those strategies are adopted which is modelled by supervising teachers.
- (c) Failure of teacher education – failure to manifest both omission and legitimation. By failing to question pedagogical problems and uncritical attention to prior knowledge of student teachers.
- (d) Failure of educational theory – underdeveloped state of theories in teaching fails to recognise ethnical and practical questions about a disadvantage group in teacher education course.
- (e) Nature of work – teachers work is conservative in nature, hence unable to implement their teaching freely. (p. 343-347)

Hatton had identified significant examples and features of teachers' work that turns to be bricolage and provides sound theoretical explanations on the basis and nature of teacher education and practices of teachers' in education. Hatton's work signifies that there is an urgent need to change and restructure components of teacher training programmes to achieve standards and scientific enquiry in teaching and which I think is highly related to accountability in our work as teachers.

Reconstructing Teachers' Professional Identity

The third part of the paper focuses on the ways in which professional identity of teachers' could be reconstructed.

Democratic Professionalism: Activist Teacher Identity

One of the major discourses circulating around the issues of teacher professionalism is democratic professionalism. Discussion on *democratic professionalism* is of significant importance for the purpose of this paper because it considers views of all stakeholders in decision making through collaborative and cooperative action. It

seeks to develop broader understandings within the community, especially between students, parents, teachers and others on how education system operates. This also builds a collective effort to secure the status and autonomy of the profession by acting responsibly.

Sachs (2001) explains that this approach is identified as a strategy for industry development, skills development and work organisation. The strategies used, provide teachers' with relevant skills to improve their practices. Sachs's democratic professionalism is an 'inclusive' form of professionalism that provides a platform for groups to understand the limitations of each other's work. Therefore democratic discourse leads to the development of an activist professional identity in teachers. I believe that the proletarianization of the teaching profession can be appropriated through activist teacher identity model. That provides opportunities for open flow of ideas, creates individual and collective capacity for people to solve problems, use of critical reflection and analysis to evaluate problems and looks at the collective welfare of people by promoting democratic way of life. (Also see Sachs, 2001, p. 157)

An activist teacher identity reduces exploitation, inequality and oppression amongst and between all the stakeholders of the school and rather develops principles of equality and social justice. This model of identity minimizes the illegitimate domination of a group of people in the profession. Currently an activist teacher identity is portrayed through teacher trade unions, which bargain on issues collectively for a common interest. To achieve an activist identity one must focus on the strategies of identity achievement which are described as 'acknowledging the importance of professional self-narratives' and 'development of practices' that involves engagement and imagination, providing structures and affective conditions for identity. I will propose 'self-narratives' as an influential way of achieving an activist teacher identity for the discussion in this paper.

Self-Narratives

Self-narratives as explained by Sachs (2001) are "culturally provided stories about selves and their passage through life that provide resources drawn upon by individuals in their interactions with one another and with themselves" (p. 157). Gergen (1988) views narratives as effective social constructions that undergoes continuous alterations through interaction processes and thereby constructs relationships to sustain and enhance various actions. These are also 'symbolic' systems that are used for 'justification', 'criticism' and 'social solidification'.

Teachers' construct their self-narratives through experiences and relate to their 'social, political and professional agenda'. The development of self-narratives originates from teachers' own schooling experiences, "embedded and reinforced in the course of their professional life in schools" (Sachs, 2001, p.158). Sachs points out that self-narrative provide a collective professional identity and provocation for renewing teacher professionalism. In order to test the relevance and validity of these 'narratives' as a basis for 'reconstruction of identities it needs to be made public. The ideas and judgement portrayed in stories should be 'debated' and 'contested' by other 'actors' so that it becomes a 'lively professional development'. These also enables teachers' to engage in effective dialogues amongst each other about the educational processes, schooling, discipline knowledge, use of pedagogy and debating ways of building effective policies and practices in education.

Clandinin and Connelly (1994) "outline an approach towards narrative that involves a movement between three sets of questions: transition from field experience to field texts, from field texts to research texts and finally from research texts to the research account" (p.413). According to Hooley (2007) teacher narratives provide directions towards learning projects and when integrated into teacher education programs based on systematic narrative inquiry can lead to 'discursive' and 'authentic' learning, through a mixture of disciplinary, curriculum studies and classroom experiences. Hooley also outlines the importance of right construction of knowledge blending both logical/scientific thinking and narrative thinking so that the personal interpretation provides valid and unconflicting results.

Recommendations

The issues and challenges to teachers' professional identity points out towards some possible speculations on negotiating teacher identity in current times.

The explanation so far provided in this paper on the issues and challenges imposed to teachers' professional identity points out that an urgent attention is needed to restructure the official knowledge base of the modernized teaching profession, through a conservative 'identity policy'. Gopinathan et al (2008) points out that there is an urgent need to recognise teachers' work as complex and demanding therefore improvement in teacher quality requires a re-conceptualization of initial teacher education that recognises the intellectual dimension such as autonomy, control and responsibility, reflexivity, heteronomy and continuous learning as critical attributes that define teachers' work in the 21st century.

These changes will bring professional standards for teachers' developing 'lifelong learning' through recontextualizing knowledge structures and imposing demands and standards to review the roles and responsibilities of teachers'. There is a need for innovation in teacher preparation programmes to broaden the entry requirements for

teacher education in universities so that a range of students enter the profession. It is also important to note that teacher preparation programmes should maintain a continual innovation to respond to the changing nature of the profession. Explanation through Bolivar and Domingo (2006) on the reconstruction of identity requires, the emergence of new roles and relationship amongst teachers, re-designing their work setting, the organizational structures and the ways of thinking about and of performing teaching.

Therefore a new design for teacher education becomes essential, as one which should facilitate strong partnership between key stakeholders- university, schools and the community. I agree with Gopinathan et al (2008) in saying that principles and strategies must ensure productive and successful partnership in teacher education and government should play a key role in facilitating this partnership.

Final Comment

This paper attempts to explain some of the dominant issues that revolve around the teaching profession today. The main focus of this paper is to explain the severity of the issue on teacher professionalism and teachers' work in the 'knowledge age'. The central idea of this paper has been examined through the cited works of Bernstein, by identifying the issues of concern and therefore providing some possible explanations to remedy the problem. This paper has used the cited work of a number of influential writers on the sociology of education, whose ideas have been used to explain the key concepts of the paper and to put the issues into perspective.

Furthermore, this paper suggests a real need for appropriating teachers' professional identity through re-designing of teachers' work. I have intended to explain how regionalization of knowledge, genericism and educational reforms pose challenges to teachers' traditional identity, by providing vivid explanation through the concept of bricolage by Hatton (1988). The paper draws significant emphasis on universities that provide teacher education to build on the scientific enquiry in teachers' work rather than 'rote' learning. This paper suggests that democratic professionalism using an activist teacher identity model through self-narratives could empower teachers towards the reconstruction of their professional identity.

I would re-iterate that teacher education needs re-conceptualization which involves intellectual dimensions of teaching that is critical in nature and involves scientific inquiry. I also find it important to highlight through the discussion in this paper that, if teachers' professional identity is to be reconstructed it needs the combined efforts of all stakeholders of the profession. A thorough effective 'partnership' that involves a mutual understanding between all stakeholders' to enhance productive teaching and learning in schools, thereby professionalising the teaching profession in the new era.

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Assessment of Availability of the Human and Material Resources for the Implementation of the New Basic Education English Language Curriculum in Kaduna State

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ABSTRACT

This study investigates the availability of human and material resources for the implementation of the new basic education curriculum in English language in Kaduna North LGEA of Kaduna State. A total number of twenty (20) teachers from ten (10) randomly selected Junior Secondary schools from Kaduna North Local Government Area were used for the study. The results of the study showed that 65% of the English teachers used for the study are qualified while 35% of the English teachers are not qualified. 65% of the teachers indicated that the number of available English Language teachers are inadequate while 35% indicated that the English Language teachers available are adequate. The findings also revealed that there is insufficient supply of instructional materials (such as students textbooks, teachers guides, charts, slides, projectors, tapes, audio and video, CDs, DVDs etc) and facilities such as language laboratories, ICT and libraries in all the schools visited. It is recommended that adequate English language teachers should be employed and deployed to schools for quality basic education curriculum delivery. It is also recommended that a comprehensive training/retraining exercise that would enable teachers undergo remedial/capacity building programmes be provided for teachers. Similarly instructional materials should be provided in sufficient quantities in all schools to facilitate the teaching-learning process.

Keywords:

INTRODUCTION

The development of human and material resources have been the focus of concern, of recent, towards the development of a nation. This is due to the fact that the growth of tangible capital stock of a nation depends to a considerable degree on human capital development. Without adequate investment in developing the human and material resources of the education sector, the possibility of the growth of any nation might be hampered. Education is the vital instrument for social and economic mobility at the personal level and an instrument for transformation of society at the National level. Basic education which is the focus of this study is the first level of education. Apart from the home being the first agent of socialization, the basic education school is the first place that introduces formal education or literacy to the child. In other words, basic education school is the foundation upon which all other levels of education are built.

The Universal Basic Education (UBE) programme which came into existence in September 1989 was expected to provide free and compulsory education from primary to Junior Secondary levels. However, researches (Okpala 2006, Zwalchir 2008, Maduwesi 2005, Ibukun 2009) have shown that the lack of adequate human and material resources are the two critical problems that could hinder the successful implementation of UBE. Like every other enterprise, the success of UBE depends solely on the provision of adequate human and material resources.

Ayodeji (2004) lamented that the demand of education is growing higher everyday but the available resources are not keeping pace in terms of the development. In support of this UNESCO's Education for all (EFA) Global Monitoring Report (2005) provides a detailed analysis of factors influencing the quality of education in several regions of the world, which it says could prevent many countries from achieving EFA goals by 2015. These include lack of human and material resources for schools, number of years and their training, facilities etc. In curriculum implementation teachers are the heart beat or key implementers. It is in view of these observations that this study sets out to assess the availability of human (teachers) and instructional materials in the implementation of the new basic education English language curriculum in selected Junior Secondary Schools in Kaduna North Local Government Area of Kaduna State.

LITERATURE REVIEW

Human and material resources are two most important ingredients in the progress and development of any sector including education. Infact, human resources (i.e teachers) are the life wire of the educational system because they plan, organize, direct, co-ordinate, implement and control the use of other available resources for the achievement of educational goals and objectives. The education enterprise has been described as one of the largest industries considering the numerical strength of those involved in its production and consumption.

Historical evidence have proved that advanced countries depended on education for their rapid growth such as those of united states, former Sonet Union, Denmark and Japan. It is a global assertion that education is the solid rock of development. It is expected that the educational system will produce the quality and quantity of human resources required for the economy's growth using the right mix of inputs.

Zwalchir (2008) has observed that appropriate and quality education depends on the quality of the teaching staff and the quality of the instructional materials available and utilized by schools. Teachers are the most important part of human resources in educational institutions. Various studies have been conducted the assess the Universal Basic Education Programme and how efficiently resources have been utilized towards ensuring qualitative and quantitative functional basic education in Nigeria (Falayajo, Makoju, Okebukola, Onugha and Olubodun (1997) Okpala (2006), Kolomba and Mpaju (2003), Enoch and Okpede (2000), Maduwesi (2005) Odo (2000). Infrastructural facilities, teachers provisions, instructional materials are among the issues identified that could hinder the successful implementation of any curriculum at any level of educational system.

OBJECTIVE OF THE STUDY

To determine the human (teachers) and material resources (i.e instructional materials) available for the implementation of the new basic education English Language curriculum in Kaduna North LGEA of Kaduna State.

RESEARCH QUESTION

What is the quantity and quality of the human and material resources available for the implementation of the new basic education curriculum in English Language Kaduna North LGEA of Kaduna State.

METHODOLOGY

The survey design was used for this study. The population of the study consist of all the three hundred and eighty four basic schools and two thousand one hundred teachers teaching in such schools in Kaduna state. Kaduna North LGEA was used for the study. Simple Random sampling technique was used in selecting ten (10) junior secondary schools from Kaduna North LGEA of Kaduna State of Nigeria. A total number of twenty (20) teachers were involved in the study. Teachers were classified into two namely, qualified and not qualified teachers. Qualified teachers possess the Nigeria certificate of Education (NCE), or Bachelor of Art Education (BAEd)/Bachelor of Science Education (Bsc Ed) or Bachelor of Art (BA)/Bachelor of Science (Bsc) plus post Graduate Diploma in Education (PGDE). Teachers that are not qualified are those without teaching qualifications and those with teaching qualifications in other subject areas other than English Language.

INSTRUMENTATION

A structured questionnaire for teachers tagged "Availability and Adequacy of human and material resources for the implementation of the new basic education English language curriculum" was used for the study. It had two sections: section one contained demographic data such as name of school, experience, qualification and area of specialization. Section two contained the column for adequate and not adequate, where the teacher is expected to tick whether in his/her school, English teachers are adequate or not. It also contained instructional materials and the column for adequate and not adequate.

The instrument was validated through a pilot test. The instrument was pilot tested using five (5) teachers who were not part of the main study but had the same qualities as those used in the main study. A test-re-test approach using Pearson Product Moment Correlation (PPMC) was used to establish the reliability. The reliability coefficient of the instrument was 0.78. Data analysis involved the use of frequency count and percentage.

ANALYSIS AND DISCUSSION OF FINDINGS

Table 1. Frequency distribution and percentage of availability and adequacy of English Language teachers in the implementation of the new basic education curriculum.

Qualification	Number of teachers	Qualified	Not qualified	Adequate	Not adequate
NCE (English)	8	40%	-	20	30
NCE (teaching English)	4	-	20%	20	10
BAEd/Bed English	5	25	-	-	5
BAEd/Bed (other areas)	2	10	-	-	5
BA/HND	1	-	5%	5	5
Total	20	75%	25	45	55%

NCE = Nigeria Certificate of Education, BA = Bachelor in Art, BAEd = Bachelor of Art Education, Bed = Bachelor of Education, HND = Higher National Diploma

Table 1 shows the frequency and percentage of qualified and adequate English Language teachers. The table shows that 40% of English Language teachers are NCE teachers that read English Language; 20% are NCE teachers that did not read English Language but teach English Language; 25% are BAEd/Bed teachers that read English Language, 10% are BAEd/Bed teachers that did not specialise in English Language but are teaching English Language and 5% are BA/HND teachers without teaching qualification. The Table 1 shows also the responses of teachers having indicated the adequacy and inadequacy of English Language teachers in their schools. 30% of NCE teachers that read English Language indicated adequate; 10% of NCE teachers that did not read English indicated adequate and 10% of Non-English Language teachers that have BAEd/Bed indicated not adequate while none indicated adequate and 5% of BA/HND teachers indicated adequate while 5% indicated not adequate.

The Table 1 thus indicates that 65% of the English Language teachers are qualified while 35% of the English Language teachers are not qualified. Also, 45% of the respondent indicated the available English Language teachers are adequate while 55% indicated that the number of available English Language teachers is inadequate. This implies that there is shortage of qualified English Language teachers for the implementation of the new basic English language curriculum in Kaduna North LGEA of Kaduna State of Nigeria. This is in line with Ado, Akinbola and Inyang (2010) who found the alarming deficiency in teacher-student ratio as a result of teachers' supply not meeting teachers' demand in Bayelsa State, resulting in expected corresponding large class size existence. Perhaps one should mention that shortage of English language teachers could exerts considerable influence on students' learning outcomes in English.

Table 2 Availability (AV) of instructional materials/facilities in schools

Teaching-learning materials/Facilities	School										Remarks	
												0
Curriculum Modules	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	Available in all schools visited
New Basic Education Curriculum	NA	NA	NA	NA	AV	AV	AV	AV	NA	AV	AV	available only in 5 schools visited.
Schemes of Work/Dairies	AV	AV	AV	AV	NA	NA	AV	AV	NA	AV	AV	Available in all schools visited.
Teachers English Textbook	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	Available in all the all schools.
Teachers guide in English	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	Not available in all schools.
Students English textbook	AV	AV	NA	AV	NA	AV	AV	NA	AV	AV	AV	Available in some schools in small quantities.
Tape recorder	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not available in all schools visited.
Audio CDs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not available in all schools visited.
Video/DVDs	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not available in all schools visited
Posters charts, flashcards	AV	AV	NA	AV	AV	AV	NA	NA	NA	NA	NA	Available posters and charts/flash cards are very few
Language laboratory	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not available in all schools visited.
ICT centre	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not available in all schools visited.
Library	AV	AV	AV	NA	NA	AV	NA	NA	AV	NA	NA	Available only in 5 out of the ten schools visited.
Slide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not available in all schools visited.
Projector	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Not available in all schools visited.

Av = Available NA = Not available

From table 2 above, the supply of basic instructional materials such as teacher’s guides, students text books is limited. Infact there are no teacher’s guides, slides, projectors, VCDs, DVDs etc in all the schools visited. Other instructional materials such as charts, pictures and posters are limited.

The New Basic Education Curriculum is available in only in five (5) out of ten (10) schools visited. Teacher’s textbooks and students textbooks are few and there are few, if any, charts, posters, pictures, models etc in the classrooms other than backboard.

CONCLUSION

The role played by teachers in any educational system is enormous. They are responsible for the translation and implementation of educational policies and curriculum for all-round achievement of the child. This is why the National Policy on Education stated that “no education can rise above the quality of its teachers”. Similarly, no nation or society can rise above the quality of her education. The implementation of the new basic English language

curriculum, therefore, lies with the teachers. Their qualifications should be scrutinized in order to ensure the successive implementation of quality instruction. In the same vein, instructional materials which also play valuable roles in the teaching learning process, should be provided in adequate supply. Provision of facilities such as language laboratories, ICT centres and libraries will go a long way to enhance the performance of students in oral and written English Language and possibly influence their overall performance in other subject areas, since English Language cuts across the curriculum. The findings of this study corroborated the findings of Ado et al (2010) opined that human and material resources constitute strategic factors in the implementation of educational policies and curriculum.

RECOMMENDATIONS

Capacity Building

The quality of teachers is a determinant in the implementation of the new basic education English language curriculum. Teachers constitute the human resource required for the facilitation of achievement of the objectives of the basic education curriculum and its successful implementation. Since teachers are the key or heat beat of the curriculum what they do in the classroom has significant effect on the academic achievement of the child. Capacity building for teachers is therefore, imperative for the implementation of the new basic education curriculum. The capacity building process should be systematic and continuous through workshops, seminars, enlightenment programmes, orientation courses and other useful educative activities.

Professional growth and development during service should be encouraged. The number of qualified teachers presently in the schools especially for English Language subjects is grossly inadequate for implementation of the new English language curriculum. Ibukun and Okebukola indentified teachers' quality and dedication as significant predictors of quality of education. Therefore, the successful implementation of a curriculum is a resultant effect of quantity and quality of the teaching working force.

Production and provision of textbooks and other instructional materials

The information in the UBEC 2006 document is that free textbooks will be provided for four core subjects in primary schools and five core subjects in Junior Secondary Schools. These include English, Mathematics, Basic Science and Technology. The need for the provision of textual materials for students cannot be ignored. Many students come to school without books for a number of reasons, one of which is poverty. The production and provision of textual and other instructional materials such as teachers guide, handbooks, manuals etc. should be made priority for quality delivery of the curriculum. Basic instructional materials such as tape recorders, audio and video DVDs and CDs, posters, charts, flashcards etc that would facilitate the teaching of English Language should be part of the package in the provision of Government in implementing the English Language component of the new Basic Education Curriculum. It could be argued, though, that teachers at these level should improvise instructional materials.

Infrastructural Facilities

The disarticulation of JSS from SSS in order to ensure the existence of two separate administrations in the existing secondary schools would not only require more qualified teachers, it would also entail the provision of additional infrastructures in the junior secondary school. There is the need for new laboratories especially if students had been sharing laboratories with the senior secondary school students. This would enable the exposure of J.S. (1-3) students to practical laboratory experiences, acquisition of the four language viz listening, speaking, reading and writing without any hindrance.

Improvement of Teachers Quality and Quantity

The popular saying that "no educational system can rise above the quality of teachers in the system" is rather apt at this moment in the Nigerian education system. It is obvious that the implementation of the new basic education English language curriculum depends largely on the availability of teachers in sufficient numbers and quality to perform the task. For UBE to have intended impact on learners, their teachers must be capable of imparting permanent literacy and numeracy and some useful communication skills to them. Government is therefore enjoined to provide adequate and qualitative English Language teachers in schools. Unqualified teachers already in the system should be advised and encouraged to go for post graduate diploma courses on part time or by correspondence in colleges of Education, universities and other specialized training institutions to enhance their professional competence to teach. Time limit should be put in place after which teachers who fail to qualify could be eased out of the system and new ones recruited to take over.

Provision of Adequate Infrastructural Materials

For basic education system to achieve its set goals, the need to put certain educational materials, equipment and facilities in place cannot be over-emphasized. Unfortunate, these facilities are in short supply in all of the schools visited. In some, cases, they are non-existence and where they are available at all, they are in deplorable condition. To

enhance proper teaching-learning process in our basic schools facilities such as library and language laboratory must be well-equipped and dilapidated buildings must be reconstructed. Also, teaching aids must be made available to teachers to facilitate learning. The school environment should be made conducive and attractive for proper administration.

Moderation of Teacher-Learner Ratio per Classroom: Due to the ever-increasing quest for education its attendant increase in students' population, the number of pupils accrued to a teacher per class had unmanageably increased in most public schools in Nigeria. In fact, there are cases of over 100 pupils heaped up in a small classroom only to be taught and controlled by just a teacher in some of the schools visited. This menace can be traced back to non-availability of enough classrooms and inadequate staffing of schools. The government is therefore enjoined to moderate teacher-learner ratio to the normal 1:30 respectively by providing enough classroom accommodation and employing more effective teaching force in order to enhance effective learning in our basic schools.

Provision of Libraries and ICT Centres

All schools should be equipped with ICT centres, internet facilities and functional libraries. This will help teachers and students in accessing and retrieving information as at when due without unnecessary delay or hindrance.

Replication of this kind of study

This kind of study can be conducted in other Local Government areas of Kaduna State and other states in the country as it will help in the improvement and development of human and material resources at the local, state and National Levels.

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Forty Years of Environmental Education in the Portuguese Democracy

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ABSTRACT

Since the 1970's, education is internationally recognized as the main path to tackle the growing environmental crisis. In Portugal, forty years after engaging in Democracy and, at the same time, in Environmental Education, it still a matter of discussion and calls for an analysis on the path that have been followed. Despite a reality since the very beginning of Democracy in Portugal, after the 25th April 1974, it was only in 1986, with the accession to the European Economic Community and the publication of the Portuguese Education System Law, that Environmental Education started to be included in the goals of Public School. However, since then, the course of Environmental Education has been driven mostly by external forces, from outside the education system, and has been more dependent on the involvement of teachers, individually, than on the school institution as an all.

In a time in which Portuguese Public School, as many other State public services, is deeply affected by an ongoing process of "slimming" due to the financial and economic crisis, we need to understand the Environmental Education past decade's route and analyze the most probable consequences due to the current situation.

Keywords:

INTRODUCTION

Despite deeply associated with the industrial revolution, started in the end of the 18th century in England, the present environmental crisis has roots that trace back from the 16th century, when a world capitalist economy born and started the globalizing process of the European environmental problems germinated on the womb of the feudalistic system (Moore, 2000). On the 15th and 16th centuries, Portugal opened new sea routs across the coast of Africa, establishing connections to India and Brazil, and assuming its pioneer role on the globalization process (Rodrigues and Devezas, 2009). Although this pioneering contribution on the path that brought us to the actual global ecological crisis, Portugal has never been a leader on the industrialization process, limiting himself to follow its wake at distance. However, like in other countries peripheral to the global economy, Portugal didn't stayed apart of the ecological problems and, as soon or as late as its neighboring European countries, the environmental questions emerged on its society. One of the most premature landmarks of the environmentalist tendencies in Portugal was the foundation, in 1948, of the first social movement for nature conservation, the League for Nature Protection (LPN in its Portuguese original name), a step that soon pointed to the dominance of nature conservation upon all other environmental concerns, a situation that persisted until the 1990's (Ramos Pinto, 2004). Already dominated by the strong influence of the conservationist movement, in 1985 was founded the National Association for Nature Conservation- Quercus, but, despite its name, this environmental non-governmental organization soon will abandon an exclusive dedication to the biodiversity and diversify its actions in subjects such as climate change, recycling, renewable energies or water resources management, following the expansion of the environmental problematic along the 1990's (Spínola, 2005).

It was after the end of the Dictatorship, and with the Democratic system implanted with the Carnation Revolution on 25th April 1974, that environmental concerns in Portuguese society began to achieve some relevance, gaining marked importance when Portugal accessed the European Economic Community (EEC) in 1986. Portugal was one of the rare countries on the world that soon, in the year of 1976, added in its Constitution the right to live in a healthy and ecologically balanced environment, and also the duty of defending him (Article 66th of the Portuguese Republic Constitution, published on the Diary of the Republic, nº86, series I, 10th April 1976) (Sharma, 2010). However, it was only in 1987 that, in fulfillment on what is stipulated on the article 66th of its Constitution and driven by the EEC accession, that Portugal published its Law on the Environment (Law nº11/1987, 7th April), despite a

Secretary of State for the Environment already existed since 1975 in the scope of the Ministry for Social Equipment and Environment (Decree-Law nº550/1975, 30th September), which, later, in 1990, evolved to its own Ministry, the Ministry for the Environment and Natural Resources (Ramos Pinto, 2004).

On the course of this growing concern about ecological balance and with the boost of the international conferences that established the education as the main path to achieve solutions to environmental problems, Portugal started on the 1970's a route in which the Environmental Education, firstly timidly and then in a most ostensive manner, has become integrated on the curricula of the compulsory education and acquired some dynamism on the non-formal education, through media, environmental non-governmental organizations and public institutions. Four decades after the implantation of a Democratic system in Portugal, which opened its doors to the international influence and to the turbulence of social movements around the ecological cause, and in a moment when a reduction on the State's role take place in several areas, especially in education, is of great interest evaluate the Portuguese path on the Environmental Education and analyze the consequences deriving from the most recent transformations that have been made on its education system.

THE ENVIRONMENTAL EDUCATION ON THE PORTUGUESE EDUCATION SYSTEM

Even after an international recognition of the Environmental Education, with the first United Nations world conference on the Human Environment, held in Stockholm in 1972, and, through the Belgrade Charter, in 1975, and the Tbilisi Conference, in 1977, with its objectives clearly defined, the Portuguese effort to integrate it on the education system started very shy and slow (UNESCO, 1980; Hungerford e Peyton, 1976). The education system reform of 1973 (Law nº5/1973, 25th July), quickly abandoned with the end of the Dictatorship regime after the 25th April 1974 Revolution, chose the "nature observation" as one of the activities of the newly created preschool as also to the already existing primary education. In 1975, after the Democratic Revolution, Portugal includes, on the first cycle of the primary education, a new curricular area named Physical and Social Environment with which pretended to encourage the development of a responsible attitude that could promote the respect for life and promote conservation, protection and improvement of the environment (Teixeira, 2003). However, only after the Education System Law, published in 1986 (Law nº46/1986, 14th October), and despite with no formal existence and most dependent on the circumstances than in the Law itself, the Environmental Education starts to gain some curricular space (Carapeto, 1998). Although this Law leaves out the Environmental Education of its objectives for primary and secondary schools, and even don't mention it for extra-school education (Article 23th) and leisure times activities (Article 48th), it assumes for pre-school education the goal of "favoring the observation and the comprehension of the human and natural environment" (Article 5th, point 1, paragraph c) and defines the "ecological education" as one of the several components of a new curricular area, the "personal and social education", to be created in all cycles of primary education (Article 47th). Curiously, it was in the Environmental Associations Law (Law nº10/1987, 4th April), published 6 months after the Education System Law, the place chosen by Portuguese policy makers to directly obligate the Ministry of Education on the Environmental Education tasks, mentioning that "it should manage study plans and programs in order to sensitize and educate youth to preserve the environment (...), to which should make use of the cooperation with the associations for the protection of the environment" (Article 10th).

The Education System Law was followed by a curricular revision in 1989 (Decree-Law nº286/1989, 29th August) that, to accomplish the "ecological education" and other subjects considered in the personal and social education, created the discipline of "Personal and Social Development" (Article 7th) directed to all students of primary and secondary education. Maybe because it presented itself as an optional choice against Moral and Religious Education, a discipline, that time, already solid on the schools of Portugal, a country markedly Catholic, the discipline of Personal and Social Development has never been able to assert itself and the intention soon was abandoned. Curiously again, it was a non-disciplinary curricular area, created by the same curricular revision, the School-Area (Article 6th), which, without objectives defined accordingly but searching for a "development of knowledge through multidisciplinary projects and activities, articulation between the school and its surrounding community, and also the personal and social education of students", becomes the fertile landscape for the Environmental Education along the 1990's.

Flexibility, autonomy, multidisciplinary and connection to the surrounding community should have been the School-Area intrinsic characteristics that allowed its permeability to the environmental growing concerns that flourished on the Portuguese society along the 1990's. This non-disciplinary curricular space, moored in projects, had the ability to absorb, from outside the school, what, that time, was called an "environmental fashion", smoothing the curricula and legislative structural fails in what it concerns to the Environmental Education. Despite constraints due to some deficiencies on teacher training for Environmental Education and also to some resistance to participate, the School-Area revealed itself as an important contribution for changing attitudes and behaviors among students and teachers involved (Mateus, 1995).

In 1996, in a rare and exemplar moment of horizontal governance, the ministries of Education and Environment signed a protocol in order to build conditions needed to promote the Environmental Education on the

Portuguese schools, forecasting its integration on primary and secondary curriculum, promoting projects on schools, fomenting training teachers, integrating in networks the schools and its projects and permanently allocating human resources in the projects. However, this protocol, reformulated in 2005, didn't reach its goals and resulted only, as a benefit to schools, in a better training to a restrict number of teachers and in the availability of some equipments to support Environmental Education (APA, 2014).

Although its success, with a curricular revision on 2001 (Decree-Law nº6/2001, 18th January, and Decree-Law nº2009/2002, 18th October) the School-Area was extinct and substituted with three new non-disciplinary curricular areas on the scope of Personal and Social Education, which were: Project Area, Accompanied Study, and Civics. However, the hope that the Environmental Education would win expression on these new areas, particularly in Project Area, following the work developed on School-Area, fell through (Ramos-Pinto, 2004). Whilst School-Area, along the 1990's, had the merit to open the school outside and involve the community, the Project Area, despite maintaining a multidisciplinary approach but without objectives of articulation with the surrounding community, gathered the school to the inside of its gates. Because this new curricular structure didn't specify neither formalize the Environmental Education in the non-disciplinary areas, the dynamics of the environmental thematic remained bound to the initiative of students and teachers, which, on the other hand, is deeply associated with the influences from outside the school, namely from the media and environmental organizations. In this way, and besides the return of school to inside its gates, another reason to explain why the Project Area wasn't able to keep the dynamic reached by the School-Area, may have been because, on the beginning of 21th century, the environmental challenge had really lost importance in the Portuguese society, overwhelmed by financial and economic problems that took over the country.

From 2011, following a new political orientation that gives priority to core disciplines, the curricular structure of the education system is changed again and the Project Area is extinct, first on the second and third cycles of primary education (Decree-Law nº94/2011, 3th August, and Decree-Law nº139/2012, 5th July) and then also in the first cycle of primary education (Decree-Law nº91/2013, 10th July). Thus, the place where, in lack of its own space, the Environmental Education made its nest was completely eliminated with no alternative within the non-disciplinary curriculum to where its dynamic could migrate. Yet, this curricular revision considers a "Complementary Offer" (Article 12th on the Decree-Law nº139/2012, 5th July) where, among others, citizenship subjects could be worked out. However, in the second and third cycles of the primary education, the schedule for the "Complementary Offer" is at the discretion of the school board and only if credits remain from other disciplines. On the first cycle these curricular complements are mandatory but only with one hour per week on schedule.

With the intention to open space to promote core disciplines, the curricular structure reform operated by the 19th Constitutional Government of the Portuguese Republic made vanish almost completely the curricular non-disciplinary area which, along more than two decades, was the womb of Personal and Social Education and, by adoption, of the Environmental Education. In this way, without its natural habitat, the Environmental Education is threatened of extinction on Portuguese schools or, at least, of surviving only by the effort of a clandestine resistance supported by some rebellious teachers that disagree with the present education system.

Presently strongly limited in its natural place, the transversality and multidisciplinary, it's worth to evaluate the contribution to the Environmental Education made by the, now reinforced, vertical and disciplinary component of the education system. The analysis of programs and text books from the last two decades reveals the presence of environmental subjects cantoned in a specific group of disciplines along the three cycles of primary education (1th cycle: Study of the Environment; 2th cycle: Nature Sciences; 3th cycle: Natural Sciences and Geography) and on the secondary education (Geography and Biology), with a tendency of reinforcing these subjects in the last decade if compared with the 1990's (Tracana et al., 2012). However, the Environmental Education couldn't be limited to the approach of disciplinary subjects on the traditional sciences, being necessary knowledge from other areas, namely Economy, Sociology and even Psychology, to allow the comprehension of the present environmental crisis causes, as also to promote the needed attitudes and behaviors to fight against this crisis (Almeida, 2007). In this context, and taking in account that its main objectives go through the rise of the environmental problems awareness (Belgrade Charter - 1975) and, specially, to the promotion of environmental literacy (Tbilisi Conference - 1977) in its three structural components: knowledge, attitude and behavior; the merely cognitive approach that is predominant in the disciplinary education, even with items related to the environment, hardly could be, in its own, considered Environmental Education.

THE ENVIRONMENTAL EDUCATION IN EXTRA-SCHOOL CONTEXT

Although educational approach makes us think immediately on school institution, in the environmental field, in Portugal, it wasn't there where it started. As we saw, the formal framework of the Environmental Education on the Portuguese educational system is sloppy, missing a direct integration in the Education System Law and even on the curriculum itself. In practice, the Environmental Education in Portuguese schools assumes an optional condition and

survives mostly by the influences of society on schools, especially through the interest and initiatives of students and teachers and not because of any intrinsic reason that could come from the formal structure of the curriculum or the education system. Accordingly, the first move to the Environmental Education in Portugal happens with organizations connected to the environment itself and not with the education system. The already referred foundation of the LPN (League for Nature Protection), in 1948, was an example of anticipation of citizenship in relation to the governments action in the environmental concerns and, particularly, with the Environmental Education, despite, that time, the concept wasn't yet established. When LPN was created, ready after the end of the World War II, the environmental non-governmental organizations all over the world were scarce, and the few existent, like LPN, were focused on wild life protection (McCormick, 2004). Even so, the first objective of LPN, registered in its foundational statutes of 1948, was "raise interest in Nature (...) through an adequate education of the public opinion" (article 2th, paragraph a). From the government, only much later, but even so before the beginning of the democratization process of the country, started the first environmental interventions, namely with the Third Plan of Foment (1968), with the creation of protected areas (National Park of Peneda Gerês, in 8th May 1971, and Natural Reserve of the Ilhas Selvagens, in 29th October 1971) and with the constitution of the National Commission for the Environment (1971), this commission with responsibilities in the domains of information and sensitization to the environment and responsible for the first commemoration of the Environment World Day, in 5th June 1973 (Ramos Pinto, 2004; Evangelista, 1992).

A most consistent governmental structure for the environmental area was initiated after the Democratic Revolution of 25th April 1974, with the creation in 1975, in the scope of the Ministry of Social Equipment and Environment, the State Secretary of the Environment (Decree-Law nº550/1975, 30th September). It was inside this State Secretary that were created or organized the governmental structures responsible for the development and implementation of national environmental policies, in the scope of which Environmental Education concerns arises to "encourage the collaboration and participation of the population in the enhancement of the environment" through the implementation of "campaigns of disclosure, participation, and training" , in the responsibility of the National Commission for the Environment, of the National Service for Population Participation and of the regional commissions for the environment. An important impulse to the Environmental Education in Portugal was given at this point by the National Service for Population Participation with the launch of the "Man and Environment" educational program, directed to teachers and, in a multidisciplinary perspective, articulating the ecological, social and historic-cultural perspectives. Until 1983, time when it was extinct, it was this National Commission for the Environment who was formally in charge of promoting the Environmental Education in Portugal, an institution from the environment area and not from education, as will be for long time. After this, in 1987, these competencies were transmitted to a new organization, the National Service of Parks, Reserves and Nature Conservation which, by its own nature, will keep the Environmental Education under the conservationist domain (Ramos Pinto, 2006). That year, with the publication of the Environment Law (Lei nº11/1987, 7th April) a new organization emerges to be responsible for the Environmental Education, the National Institute for the Environment, which has as its challenges, among others, promote that area in cooperation with the "municipalities, public administration services, public, private and cooperative institutions, and schools and universities" (Article 39th). This new organization, that, curiously, assumes itself as non executive, underline, "with a special emphasis", to be destined to promote actions of "training and information for citizens" (Article 4th, point 2).

This Environment Law assumes, despite not directly committing itself with its implementation, that "the existence of an environment propitious to health and (...) to a better quality of life, presupposes the adoption of measures that (...) includes the environmental component and the inherited values into primary education and vocational training, as well as its promotion through the media, being the government liable to produce learning resources to support teachers (books, brochures, etc.)" (Article 4th, point 3). And it is this framework that will increment in a significant way, along the 1990's, the Environmental Education practices in Portugal, to which the Environmental Associations will contribute much, especially after 1987 when they also see their specific statute recognized and its cooperation on this subject underlined (Articles 10th and 11th of the Law nº10/1987, 4th April). It is also in this Law that "the central, regional and local entities from the administration, in the scope of its competences, (and) in cooperation with the environmental associations", are responsible to "promote to the entire population, and particularly children of preschool age, awareness and knowledge of nature" (Article 11th).

With the accession of Portugal to the European Economic Community, in 1986, which opens immediately with the celebration of the European Year of the Environment (1987), and with the dynamism inputted by several national environmental associations, besides LPN, from here also Quercus- National Association for Nature Conservation, and GEOTA- Study Group for Planning and Environment (1986), the Portuguese society begins to awake to the environment concerns (Soromenho-Marques, 2005). The creation of the Ministry of Environment and Natural Resource in 1990 and, in the same year, of ASPEA, the Portuguese Association for Environmental Education, reveals the level of importance that the environmental concern was reaching in the Portuguese society. When, in 1992, the Earth Summit organized by the United Nations follows in Rio de Janeiro, in Portugal there is already an important

dynamic in which interact several actors and that is particularly noticeable in the push that affects Environmental Education. In 1993, the National Institute for the Environment is substituted by a new organization, the Institute for Environmental Promotion (Decree-Law nº 194/1993, 24th May), which keep the same responsibilities in what concern to the Environmental Education but wins a new dynamism, financing, with European community funds, environmental projects developed by environmental associations and schools, editing some journals (Environment Report, Journal of Environment and Notebooks Environmental Education) and producing several pedagogical resources in the environmental area (Ramos Pinto, 2004).

After its public discussion, in 1995, the National Plan of Environmental Policies was approved (RCM nº 38/1995, 21th April) and dedicates a specific chapter to the Environmental Education, recognizing the need for an articulation between educational and environmental policies. Just after, in 1996, as a result of a cooperation protocol between the Ministries of Environment and Education, a mobility program for teachers was created and allowed gather professionals from both areas, environment and education, in Environmental Education projects that were developed not only from school context but also, several times, through the activities of the environmental associations and municipalities. This protocol, reformulated in 2005 to engage expressly the environmental non-governmental organizations, created a network of coordination teacher for environmental education projects that, today, is constituted by only four professionals, a number obviously too small to the needs of the country. These teachers developed a national work through the environmental associations Quercus, ABAE, ASPEA and GEOTA, in which several emblematic projects have been developed such as the Eco-School Program (ABAE), the National Journeys of Environmental Education (ASPEA) and the Coastwatch project (GEOTA) (APA, 2014). In this context of a growing enhancement of the Environmental Education practices, in which arose, together with environmental NGOs, municipalities and protected areas, important equipments to help in the Environmental Education (environmental education centers, wild life recovering centers, environmental interpretation centers, among others), the Environmental Education begins to be a constitutional right in Portugal. In fact, in 1997, with the 4th revision of the Portuguese Constitution, becomes an incumbency of the "State, by the means of its own organizations and with the implication and participation of citizens", the promotion of the Environmental Education and the respect by the environment values (Constitutional Law nº1/1997, 20th September, point 2, paragraph g).

However, with the financial resources getting reduced, with the disinvestment in teacher training and with a disconnection between environmental and educational policies, the Environmental Education optimistic expectations suddenly vanished (Schmidt et al., 2011). In 2001, nine years after its creation, and with the purpose of reducing costs, the Institute for Environmental Promotion, that becomes the visible face of the State's constitutional obligations in what concerns to the Environmental Education, and that marked the country's best moment in this area, is extinct by aggregation with the Environment General Directorate to become the Institute of the Environment (Decree-Law nº8/2002, 9th January), which will also disappear in 2006 by aggregation with the Institute of Wastes to be created the Portuguese Agency for the Environment (Decree-Law nº207/2006, 27th October). The disappearance of the Institute for Environmental Promotion defines the moment when the Environmental Education in Portugal starts follow a descendent pathway with great instability. In fact, since then, the Environmental Education actors, particularly Environmental NGO, schools and municipalities, started losing the support for their activities once former financial resources were diverted to other purposes; as also because the National Strategy for Environmental Education never comes out of a simple promise (Ramos Pinto, 2006). Presently, despite some national projects still keep a good activity level, as the Eco-School Program (ABAE), most of the Environmental Education in Portugal is in decay, it's fragmented and lost its visibility and the dynamism reached in the past.

Since Portugal owns two autonomous regions, in which regional governments exercise State's responsibilities on environment and education, is worth mentioning that only the Autonomous Region of Azores includes in the structure of its present government an organism with expressed competencies in Environmental Education, the Direction of Services for Nature Conservation and Environmental Awareness of the Regional Environment Directorate, which is responsible for propose, "coordinate and execute the environmental education programs" (Regional Regulate Decree nº11/2013/A, 2th August, Article 37th). In the structure of the present government of the Autonomous Region of Madeira there is no mention to Environmental Education, neither in the structure of the Regional Secretariat for the Environment and Natural Resources (Regional Regulate Decree nº20/2012/M, 22th August) or in its Regional Directorate for Planning and Environment (Regional Regulate Decree nº30/2012/M, 5th November), and neither in the Regional Secretariat for Education (Regional Regulate Decree nº5/2012/M, 16th May) or in its Regional Directorate for Education (Regional Regulate Decree nº8/2012/M, 18th June) exist any mention on this important area enshrined on the Constitution of the Portuguese Republic.

THE ENVIRONMENTAL EDUCATION IN PORTUGAL IN THE LIGHT OF TBILISI AND BELGRADE

The purpose of the Environmental Education is, accordingly to Belgrade Charter (1975), to alert and awareness to the environment and its problems through a lifelong education, and, in the light of the Tbilisi conference (1977), to

promote the environmental literacy (UNESCO, 1980; Hungerford and Peyton, 1976). Along the past decades, despite a common basis, several authors considered a wide spectrum of components to include in the environmental literacy concept, making its definition a dynamic process (Hollweg et al., 2011). For example, Simmons (1995) identified seven components of the environmental literacy: 1. Affect (e.g., environmental sensitivity, attitudes, and moral reasoning); 2. Ecological knowledge; 3. Socio-political knowledge (e.g., the relationship of cultural, political, economic, and other social factors to ecology and environment); 4. Knowledge of environmental issues; 5. Skills pertaining to environmental problems/issues and action strategies, systemic thinking, and forecasting; 6. Determinants of environmentally responsible behavior (i.e., locus of control and assumption of personal responsibility); 7. Behavior (i.e., various forms of active participation aimed at solving problems and resolving issues). Another framework example, created by Wilke (1995), defined four clusters of environmental literacy components: cognitive dimensions (knowledge and skill), affective dimensions, additional determinants of environmentally responsible behavior, and personal and/or group involvement in environmentally responsible behavior. Previously, Disinger and Roth (1992) suggested that environmental literacy was essentially the ability to perceive and interpret the relative health of environmental systems and take appropriate action to maintain, restore, or improve the health of those systems. In that time, Roth (1992) considered that people should be able to demonstrate in some observable form what they have learned, namely their knowledge on key concepts, skills acquired, disposition toward issues, and the like, and emphasized that environmental literacy should be defined in terms of observable behaviors.

Nowadays, is of common understanding that environmental literacy must include knowledge and understanding of environmental concepts, problems, and issues, a set of cognitive and affective dispositions, and a set of cognitive skills and abilities, together with the appropriate behavioral strategies to apply such knowledge and understanding in order to make sound and effective decisions in a range of environmental contexts (Hollweg et al., 2011).

As a simple definition, environmental literacy could be seen as a domain of four interrelated components: knowledge, dispositions, competencies, and environmentally responsible behavior (Cook e Berrenberg, 1981; Hungerford e Volk, 1990; Stern, 2000; Hollweg et al., 2011). Despite this simplification, each of the above four components hold a complex structure that needs to be taken in consideration in environmental education practices, namely the fact that, among others, knowledge should include physical, ecological, social, cultural and political systems, that dispositions involves sensitivity, attitudes, personal responsibility and motivation, that competencies implies identify, analyze, investigate, evaluate and resolve environmental issues, and that environmentally responsible behavior includes practices in eco-management, persuasion, consumer/economic action, political action and legal action (Hollweg et al., 2011).

Being stated that Environmental Education should be a continuum process, lifelong, and including its cognitive, affective and behavioral dimensions, the question is whether the practices in Portugal are in accordance with these objectives. The Environmental Education in Portugal, inside or outside schools, misses evaluation, and prefers to feel comfortable with what is done, closing the eyes to the possibility of its effort being inadequate to the pursued goals. From the few studies that characterized the Environmental Education in Portugal, the key idea that comes up is that it has been confined to the school context since, besides its enormous difficulties to involve the surrounding community, even the majority of projects led by organizations from outside the education system are orientated to the school population (Schmidt et al., 2010). It is also evident an "infantilization" of the Environmental Education in Portugal since it is mostly directed to the youngest students and assumes a marked propensity to be recreative or playful, as also because it is based in a restrictive set of environmental themes, particularly nature conservation and waste management, forgetting important aspects to enlighten the true dimension of sustainability and its relationship with the economic activities, as is water or energy management. The mismatch between the Ministries of the Environment and of Education is also evident, keeping the Environmental Education isolated and, largely, outside the curriculum, being marked by the frailty of projects, mostly dependent on the teacher's initiatives and, as such, sensitive to the professional instability that affects them in Portugal (Schmidt et al., 2011). In this way, Environmental Education in Portugal tends to be punctual and most vertical than cross-cut, whether in topics addressed or in the targeted audience, being little integrative, strange to the sustainability concept and away from a civic approach that could lead to a highest participation (Guerra et al., 2008).

Despite the fragilities of the Environmental Education in Portugal, at least the national inquiries from the end of 1990's show that the youngest population was strongly increasing their environmental awareness, although with a deficit of information and almost none civic participation in its protection (Nave, 2004; Lima e Guerra, 2004; Ferreira de Almeida, 2004; Freitas, 2007). On other way, even with a worrying disinvestment on the Environmental Education on past decade, some studies reveal that it was sufficient to, at least at the rhetoric and cognitive level, avoid an environmental amnesia (Santos, 2010).

However, taking in account the concept of environmental literacy, it is evident that the Environmental Education practices in Portugal have strayed from the right path to a balanced and integrative development of cognitive, affective and behavioral components. The present education system doesn't formally recognize the Environmental Education as one of its objectives, leaving that constitutional obligation to the organizations responsible for the environmental management. The Environmental Education that occurs on the Portuguese schools is an informal practice not supported by the curricular structure and most dependent on the teacher's initiatives than in the system itself, besides it is profoundly affected by the sociopolitical tides of the environmental concern. Its awful curricular integration, the lack of performance evaluation, its infantilization and no integration in a lifelong education, its strong circumscription in the study of sciences, its mostly technical than educational approach (evident in the nature of the State's organizations that holds this constitutional obligation), its informative inclination and the absence of a national strategy, among others, make of the Environmental Education in Portugal an ineffective effort in the fulfillment of the Belgrade and Tbilisi objectives.

WHAT FUTURE FOR ENVIRONMENTAL EDUCATION IN A MINIMIZED STATE?

Having reached a point where it is evident the lack of linearity on the Portuguese Environmental Education route, with a clearly descendent tendency in the last decade, it is of interest to analyze the consequences of the minimizing State's process presently in place in the scope of the Program for Economic and Financial Adjustment, to which Portugal is bonded since 2011. If on one hand the results of the Environmental Education in Portugal reveal the huge effort that we still need to do, in the other hand, the actual context and the dismantlement of the State's structure in the education and environment areas, make us fear something even worst. As we saw, the curricular reforms from recent years eliminated the non-disciplinary areas and verticalized the education, centering it in the nuclear disciplines. As we know, the privileged place to develop the Environmental Education is, precisely, the non-disciplinary curriculum and, besides that, this is a multidisciplinary area that needs to be addressed horizontally, through several disciplines. In this context, reduce the Environmental Education to a cognitive approach of a set of knowledge, limited by the frontiers of some sciences, constitute a strong threat to the effort that have been done to change attitudes and behaviors toward the environment.

Nevertheless, having in consideration that the development of Environmental Education practices in schools are mostly dependent on the initiatives of teachers, and considering the reduction on the number of teacher and the devaluation and demotivation to which they has been subject, namely because of the unemployment threat and with the effective loss of their income, the most probable scenario for the next future is the stagnation, or even paralysis, of the school activity as a contribution to the environmental literacy of coming generations. The new curricular structure slaughter the development of transversal projects and the involvement between school and the community, gathering students inside the classroom and consummating a regression in the educational practices that affect much the performance of any effort in Environmental Education.

With the school return to the dictatorial, inflexible and anachronistic borders of the disciplinary structure, centered again in cognitive knowledge and forgetting competencies, what tends to happen now, the Environmental Education in the Portuguese education system return back to the time when the myth "knowing to preserve" had reigned. In the way curriculum and education system are being structured in Portugal, the Environmental Education is no longer possible and comes down to the merely transmission of knowledge in the environmental field. In present situation, the Environmental Education developed in schools will be only the one emerged in the margins of the education system, being, therefore, voluntary and optional, and dependent on the rebelliousness that, perhaps, could subsist in some teachers.

Outside the education system is not expected a better scenario since, so far, its dynamic has been also directed to the school population and always proportional to the public resources available, that are presently increasingly scarce. In addition, if on the past the Environmental Educational coming from outside the school always communed of the same errors, namely being also infantilized, punctual, based only in knowledge and not integrative, it is not expected to be in this hard context that those errors will be spontaneously corrected.

Therefore, an Environmental Education that doesn't contributed much to the environmental literacy, because it wasn't based in a continuous improvement but mostly in the persistence of error, is in an enormous risk of let itself fall asleep waiting for another conjuncture. However, considering the gravity reached by the environmental problems, globally and locally, wait is a luxury that Portugal cannot afford and, as such, it must overtake, as soon as possible, the fragilities inherited from the past and overthrow, or go around, the walls erected lately. Portugal, in its present scarcity scenario, cannot put aside the contribution that only the Environmental Education could give to improve sustainability and increase resource efficiency. To that, is not worth to keep running away from its goals only to keep the feeling that it's not just standing. It is essential to draw a new plan and define a strategy. To that, is not worth to keep running away from its goals only to feel that it's not just standing. It is essential to draw a new plan and define a strategy. The Environmental Education needs to be done with the environmental literacy, its goal, in mind. It is

mandatory that the Portuguese State, at once for all, assumes its constitutional compromise of, by its one means and with the involvement and participation of citizens, promote the Environmental Education and the respect for the environment values. To finally follow that way, it cannot take longer to define its national strategy for the Environmental Education and start immediately with its implementation, being understood that one of the problems to solve immediately is the lack of human resources adequately trained to that specific purpose and the need for an articulation with the society.

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Texas High School Students' Ap/Ib Performance Rates: An 11-Year Study

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ABSTRACT

This study represents an analysis of trends of Texas students by ethnicity who scored at or above the criterion on the Advanced Placement (AP) or International Baccalaureate (IB) examinations over the past 11 years. Archival data from the Texas Education Agency Academic Excellence Indicator system were analyzed for all traditional public high schools with students taking these exams. The percentage of students who scored successfully on these exams has remained unchanged over the past 11 years. Furthermore, achievement gaps by ethnicity continue to persist. Statistically significant differences were present in the percentages of students who scored at or above the criterion with medium effect sizes.

Keywords:

INTRODUCTION

Declines in secondary educational performance and widening achievement gaps in the United States impact the country's ability to compete in a global and technological marketplace (Cooper, Hersch, & O'Leary, 2012; Council on Foreign Relations, 2012; Haveman & Wilson, 2007). Moreover, researchers have noted growing disparities in student achievement on national examinations by gender, income levels, and race (Barnes, Slate, & Rojas-LeBouef, 2010; Combs et al., 2010; Corra et al., 2011; Flowers, 2008; Fowler, Joyner, & Slate, 2011; Handwerk, Tognatta, Coley, & Gitomer, 2008; Holmes, 2013; Klopfenstein, 2004a, 2004b; Koch, 2012; Moore & Slate, 2008; Ndura, Robinson, & Ochs, 2003; Preston, 2006; Solórzano & Ornelas, 2002). Over the past several decades, federal and state educational policies have focused reform efforts towards closing the gaps in academic achievement for U.S. high school students. Texas has been one of the leaders in college readiness and has implemented reform initiatives to alleviate soaring college remediation costs. Specific measures that emerged included developing common core standards, boosting graduation requirements, increasing access to college preparatory coursework, and requiring a high school exit exam (Achieve, 2009; Conley, 2010; Domestic Policy Council, 2006).

Despite reform efforts from educators and policymakers, disparities in performance in advanced coursework courses (i.e., Advanced Placement [AP] and International Baccalaureate [IB] courses) for Hispanic, Black, and low-income students persist (ACT, 2011; Balfanz & Legters, 2004; Kirp, 2010; Reardon, Baker, & Klasik, 2012). The result of this inequitable access and performance can impact college preparation and college admissions decisions, thereby impacting long-term career choices (Bailey & Dynarski, 2011; Flores & Gomez, 2011). This study represents a comprehensive analysis of the trends of Texas high school student's scores on the AP/IB examinations over the past 11 years with an analysis of the differences of scores among ethnic groups.

REVIEW OF RELATED LITERATURE

One key ingredient to entering the U.S. workforce is a college degree (Bailey & Dynarski, 2011; Noah, 2012). Over the past 30 years, the competition level for scarce freshmen spaces at elite U.S. colleges has escalated (Bound, Hershbein, & Long, 2009). However, the supply of freshmen slots has not kept pace with the demand. Although the reasons for this competition abound, certain criteria have emerged as vital in the college application package. These criteria include high school grade point average, class rank, and rigor of curriculum (i.e., AP or IB programs). In addition, AP/IB course grades can also affect many of the college admissions criteria.

Historically, academic achievement gaps have been highlighted throughout the educational process, which prompted the *No Child Left Behind* legislation. The U.S. Department of Education (2001) defined the achievement gap in education as the differences on standardized examinations between Black and Hispanic students in comparison to

their White peers. One approach to addressing gaps in college readiness preparation has been the escalation of in use of the College Board's AP program to add additional rigor into the high school curriculum to prepare students for college coursework. However, in the 8th annual *AP Report to the Nation* released by the College Board (2012), Hispanic and Black students continue to be underrepresented in the AP classroom.

To alleviate the disparities in access to these courses, policymakers and educators have pushed to enroll more students in the AP and IB programs (College Board, 2012; Kyburg, Hertberg-Davis, & Callahan, 2007). However, access does not equal success in these advanced courses. Over the past 5 years, several scholars have indicated that performance on advanced coursework exams for low-income students and Black and Hispanic students might be stagnating or even declining (Holmes, 2013; Koch, 2012; Moore & Slate, 2008).

Nationally, disparities in the percentage of students who pass the criterion score of 3 on the AP exam continue to persist. Also, disparities in exam scores have emerged by geographic location within the United States. For example, in New Hampshire, almost 75% of students scored a 3 or higher whereas in Mississippi only 33% of students scored a 3 or higher. In the District of Columbia, which is predominantly Black, 50% of the 2011 AP exam scores were a 1 (Associated Press, 2012).

In 2008, Moore and Slate examined 2 years of statewide AP data collected from over 8,000 Texas public high schools. Findings from their study indicated that student success in the advanced courses differed as a function of ethnicity and gender. Specifically, Moore and Slate (2008) noted that White students were twice as likely to enroll in AP courses as Black or Hispanic students were. When analyzing exam scores on the AP tests, these scholars stated that only 50% of those Texas students who enrolled in an AP course actually took the AP exam. Of the students who took the AP exam, approximately 40% scored at or above the AP criterion score of 3 in both years. White students and Hispanic students were more likely than Black students to score at or above the criterion of 3 on the AP test (Moore & Slate, 2008).

In a more recent study, Koch (2012) analyzed the AP performance of Hispanic students from California, Texas, and Arizona in math (Calculus AB, Calculus BC, and Statistics) and English (English Language and Composition and English Literature and Composition) from 1997 to 2011. Koch indicated that all three states had significant increases in AP enrollments by Hispanic students from 1997 to 2011. It was also noted in the study that the average high AP scores for students in all three states occurred in the late 1990s, whereas the lowest average AP scores occurred in the late 2000s. Of the three states within the study, Texas had the lowest percentage of Hispanic students who scored a 3 or higher on all AP exams. Furthermore, it was noted that the percentage of Hispanic students who scored a 3 or higher on the overall AP scores in all three states had declined from 1997 to 2011 (Koch, 2012).

To determine the extent to which national trends were present in overall AP exam performance, Holmes (2013) conducted an analysis of ethnic and gender differences in AP exam performance of U.S. high school students over a 16-year time period. Findings from this study indicated that Asian students had far higher overall AP performance scores than did White, Black, and Hispanic students. Although the number of Hispanic and Black students who participated in AP exams had risen, their AP exam scores had actually declined. Holmes (2013) concluded that the large numbers of failing exam scores represented millions of public dollars wasted on AP expansion policies.

In sum, reform efforts at the federal and state level have included targeting the rigor of high school curriculum through the expansion of AP/IB course enrollment. However, several researchers (e.g., Holmes, 2013; Koch, 2012; Moore & Slate, 2008) have indicated the persistence of gaps in AP access and performance along race and income lines despite these reform efforts. Continued analysis of the long-term performance levels on AP/IB examinations by ethnicity remain warranted.

METHOD

The purpose of this study was to examine long-term advanced course (i.e., AP, IB) performance rates among Texas public high school students (i.e., from the 2001 school year to the 2012 school year) to determine the extent to which differences exist by ethnicity and the extent to which these differences have changed. The Texas Education Agency (2011) defines AP/IB Results as

The examination results of the College Board's Advanced Placement (AP) courses and the International Baccalaureate's (IB) Diploma Program courses taken by Texas public school students. High school students may take one or more of these examinations, ideally upon completion of AP or IB courses, and may receive advanced placement or credit, or both, upon entering college. Generally, colleges award credit or advanced placement for scores of 3, 4, or 5 on AP examinations and scores of 4, 5, 6, or 7 on IB examinations. (para 13)

Participants from this study were selected from all traditional public high schools throughout the state of Texas. Participants also included those students who self-identified into one of the four largest ethnic categories (i.e., Black, Hispanic, White, or Asian). Students who were excluded from the study included those students who attended private, charter, and alternative high schools; students categorized by the TEA as Limited English Proficient; students with learning disabilities; and students from other ethnic categories or multi-ethnic (i.e. comprising two or more ethnicities) that constituted less than 1% of the total population of students. Based on parameters set by the state, all participants were enrolled in either the 11th or 12th grade during the school year.

The three research questions included in the study were as follows: (a) What are the percentages of high school students by ethnicity (i.e., Black, Hispanic, White, and Asian) who scored at or above the criterion on at least one advanced academic course exit examination (i.e., AP or IB) for each school year, 2001-2012?, (b) What is the difference in the percentages of students by ethnicity (i.e., Black, Hispanic, White, and Asian) who scored at or above the criterion on at least one advanced academic course exit examination (i.e., AP or IB) for each school year, 2001-2012?, and (c) What is the trend regarding the percentages of students by ethnicity (i.e., Black, Hispanic, White, and Asian) who scored at or above the criterion on at least one advanced academic course exit examination (i.e., AP or IB) from 2001 to 2012?

A non-experimental research design was used to analyze the AP/IB examination performance rates of Texas public high school students. Archival data for the past 11 school years were obtained from the Texas Education Agency's Academic Excellence Indicator System database. After review and acceptance by a university IRB, the data were downloaded and recoded for each participating Texas high school. Assumptions for normality, linearity, and homogeneity were checked prior to conducting the inferential statistical procedure. The parametric ANOVA procedure, due to its robustness, was calculated to address the inferential research question (Field, 2009; Harris, 1998).

RESULTS

For this investigation of the performance on advanced course examinations of Texas high school students by ethnicity, three research questions were analyzed for each of the 11 school years of data available (i.e., from 2001 to 2012). The first question is a descriptive research question and the second question is an inferential research question. The final question is a trend research question used to analyze trends in student performance in advanced coursework by ethnicity from 2001-2012.

RESEARCH QUESTION 1

Presented in Table 1 are the descriptive statistics for the percentages of Texas examinees by ethnicity (i.e., Black, Hispanic, White, and Asian) with at least one AP or IB examination scores at or above the criterion scores (i.e., 3 on AP or 4 on IB) from 2001-2012. For each of the 11 years of study, a higher percentage of Asian students had at least one AP or IB score at or above the criterion score than did White, Black, or Hispanic students. Black students had the lowest percentage of students to have at least one AP or IB score at or above the criterion score for each of the 11 years. Both the percentages of Hispanic and Asian students to have at least one AP or IB scores at or above the

criterion score declined from 2001 to 2012. From 2001 to 2012, the total number of students who scored at or above the criterion on AP/IB examinations declined by 8%.

Table 1: Descriptive Statistics for the Percentage of Examinees s by Ethnicity With at Least One AP or IB Score at or Above the Criterion Score (3 on AP or 4 on IB) from 2001-2002 to 2011-2012 school years.

Year	Black		Hispanic		White		Asian	
	M	SD	M	SD	M	SD	M	SD
2001-2002	29.91	24.56	46.61	25.75	45.08	23.19	59.89	21.94
2002-2003	32.59	23.79	47.19	26.15	47.58	24.53	65.28	20.06
2003-2004	32.61	25.08	47.95	25.18	47.12	23.55	61.55	21.02
2004-2005	31.61	25.21	46.13	24.83	43.51	23.33	60.44	20.83
2005-2006	29.25	23.70	42.60	23.98	43.37	23.11	55.52	24.80
2006-2007	27.96	23.19	42.76	23.74	41.75	23.75	57.35	23.37
2007-2008	31.67	24.66	38.82	23.75	44.25	23.25	57.61	23.00
2008-2009	28.21	23.28	38.87	23.53	43.36	23.66	56.37	22.98
2009-2010	31.41	24.58	40.66	23.75	45.08	24.50	57.49	22.54
2010-2011	29.50	23.77	39.58	23.68	46.16	24.45	57.36	23.02
2011-2012	30.27	23.55	37.54	23.21	45.66	24.52	58.32	23.07

RESEARCH QUESTION 2

A univariate analysis of variance procedure (ANOVA) was conducted to determine the extent to which the percentage of student examinees with at least one AP or IB score at or above the criterion score (i.e., 3 on AP or 4 on IB) differed as a function of ethnic membership. Statistically significant differences were noted between ethnic groups for each year within the study. Scheffé post hoc procedures were then computed for pairwise comparisons of the ethnic groups (i.e., Asian, Black, Hispanic, White). Effect sizes were also reported with the partial eta squared statistic (Cohen, 1988).

Statistically significant differences were noted for each of the school years within this study. For the 2001-2002 school year, the ANOVA revealed a statistically significant difference, $F(3, 1364) = 45.52, p < .001, \eta^2 = .09$, a medium effect size (Cohen, 1988). For the 2002-2003 school year, the ANOVA revealed a statistically significant difference, $F(3, 1426) = 54.46, p < .001, \eta^2 = .10$, a medium effect size (Cohen, 1988). For the 2003-2004 school year, the ANOVA revealed a statistically significant difference, $F(3, 1510) = 49.11, p < .001, \eta^2 = .09$, a medium effect size (Cohen, 1988). For the 2004-2005 school year, the ANOVA revealed a statistically significant difference, $F(3, 1607) = 56.37, p < .001, \eta^2 = .09$, a medium effect size (Cohen, 1988). For the 2005-2006 school year, the ANOVA revealed a statistically significant difference, $F(3, 1632) = 49.27, p < .001, \eta^2 = .08$, a medium effect size (Cohen, 1988). For the 2006-2007 school year, the ANOVA revealed a statistically significant difference, $F(3, 1684) = 65.46, p < .001, \eta^2 = .10$, a medium effect size (Cohen, 1988). For the 2007-2008 school year, the ANOVA revealed a statistically significant difference, $F(3, 1769) = 59.69, p < .001, \eta^2 = .09$, a medium effect size (Cohen, 1988). For the 2008-2009 school year, the ANOVA revealed a statistically significant difference, $F(3, 1869) = 76.43, p < .001, \eta^2 = .11$, a medium effect size (Cohen, 1988). For the 2009-2010 school year, the ANOVA revealed a statistically significant difference, $F(3, 1837) =$

61.77, $p < .001$, $\eta^2 = .09$, a medium effect size (Cohen, 1988). For the 2010-2011 school year, the ANOVA revealed a statistically significant difference, $F(3, 1893) = 76.73$, $p < .001$, $\eta^2 = .11$, a medium effect size (Cohen, 1988). For the 2011-2012 school year, the ANOVA revealed a statistically significant difference, $F(3, 1981) = 87.30$, $p < .001$, $\eta^2 = .12$, a medium effect size (Cohen, 1988).

Table 2 represents a summary of the partial eta squared values and effect size results for the percentage of high school students who scored at or above the criterion score on an AP/IB exam by school year. Over the past 11 years, the effect sizes for the percentage of students who scored at or above the criterion score on an AP/IB examination ranged from .08 to .12. As such, these partial eta squared values reflected medium effect sizes (Cohen, 1988).

Table 2: *Partial Eta Squared and Effect Sizes for the percentages of High School Students who Scored at or Above the Criterion on an AP/IB exam by School Year*

School Year	η^2	Effect Size	Ethnic Group with the smallest %	Ethnic Group with the largest %
2001-2002	.09	Medium	Black	Asian
2002-2003	.10	Medium	Black	Asian
2003-2004	.09	Medium	Black	Asian
2004-2005	.09	Medium	Black	Asian
2005-2006	.08	Medium	Black	Asian
2006-2007	.10	Medium	Black	Asian
2007-2008	.09	Medium	Black	Asian
2008-2009	.11	Medium	Black	Asian
2009-2010	.09	Medium	Black	Asian
2010-2011	.11	Medium	Black	Asian
2011-2012	.12	Medium	Black	Asian

RESEARCH QUESTION 3

The percentage of students who scored at or above the criterion on the AP/IB examinations from all ethnic groups varied over the past 11 years. However, graphically portrayed in Figure 1 is the presence of gaps in academic performance by ethnic group. Specifically, gaps exist between the percentage of Asian students in comparison to the percentage of White, Hispanic, and Black students who scored at or above the criterion on the AP/IB examinations. The largest gap in academic performance on the AP/IB examinations is between Asian and Black students. Asian students were almost twice as likely as Black students to score at or above the criterion on the AP/IB examinations in each school year. The percentage of Hispanic students who scored at or above the criterion on the AP/IB examinations also declined more than any other ethnic group during the 11 years of the study. The percentage of White and Hispanic students who scored above the criterion on the AP/IB examinations were almost identical until the gap began to widen between the two ethnic groups in the 2007-2008 school year.

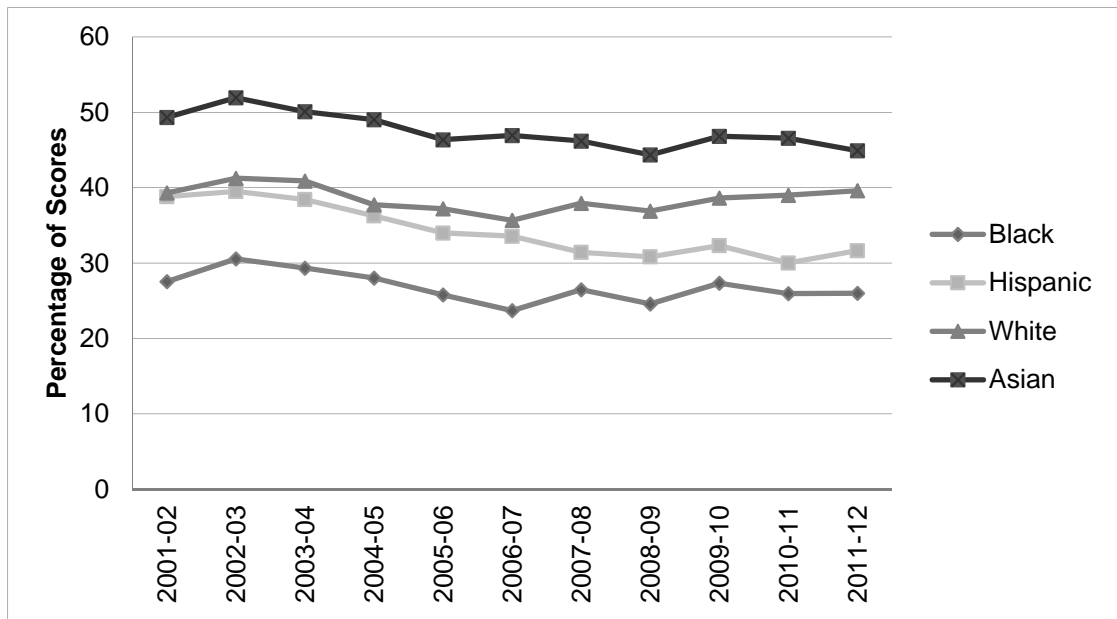


Figure 1. Overall mean percentages of scores by student ethnic groups who scored at or above the criterion on the AP/IB examinations by school year.

DISCUSSION

The gaps in academic performance on AP/IB examinations has widened over the past 11 years between White and Hispanic students, Asian and Hispanic students, and Black and White students. The largest decline in the percentage of students who scored at or above the criterion was between the percentage of Asian and Hispanic students for each of the 11 years within the study. In the 2001-2002 school year, the difference in the percentage of Hispanic (46.60%) and Asian (59.89%) students who completed an advanced course was 13.29%. By the 2011-2012 school year, the difference in the percentage of Hispanic (37.54%) and Asian (58.32%) students who completed an advanced course had increased to 20.78%.

The achievement gap also widened between the percentage of White and Hispanic students who scored at or above the criterion on the AP/IB examinations over the past 11 years. In the 2001-2002 school year, the difference in the percentage of White (45.08%) and Hispanic (46.60%) students who scored at or above the criterion on the AP/IB examinations was 1.52% with a greater percentage of Hispanic students performing well on the AP/IB examinations. However, by the 2011-2012 school year, the difference in the percentage of White (45.66%) and Hispanic (37.54%) students who scored at or above the criterion on the AP/IB examinations had increased to 8.12% with a greater percentage of White students performing well on the AP/IB examinations.

Achievement gaps on these examinations were also evident between the percentage of White students who scored at or above the criterion on the AP/IB examinations in comparison to Black students; although, this gap has increased only slightly over the past 11 years. In the 2001-2002 school year, the difference in the percentage of White (45.08%) and Black (29.92%) students who completed an advanced course/dual enrollment course was 15.16%. However, by the 2011-2012 school year, the difference in the percentage of White (45.66%) and Black (30.27%) students who scored at or above the criterion on the AP/IB examinations had widened slightly to 15.39%.

Over the past 11 years, a significant decline in the percentage of students in Texas who scored at the criterion or better on the AP/IB examinations was noted. Despite greater access and participation levels within Texas, only minor changes by ethnicity were noted for the past 11 years. Statistically significant differences were present with medium effect sizes. Very little change was observed in the percentages of Black and White students who scored successfully on these exams over the past decade. However, the percentage of Hispanic and Asian students who scored at or above the criterion on these exams actually declined in at least 3 to 5 years within the study.

The results from this study confirmed prior research that noted the persistence of gaps by ethnicity in the performance level on the corresponding exams (College Board, 2012; Holmes, 2013; Koch, 2012; Moore & Slate, 2008). Over 50% of Asian students took the AP/IB exams in Texas and performed well enough to potentially earn college credit. The outlook was much bleaker for Black and Hispanic students, whereas a smaller percentage of these students took the exams and were successful. Therefore, the educational reform efforts by federal and state educational agencies seemed to have benefited Asian students rather than the less affluent Black and Hispanic students the efforts were designed to assist.

The findings from this study also coincided with the claim by Lichten (2010) who noted a rapid increase in the access to AP courses by underprepared students would yield diminishing performance levels. Lichten (2010) also predicted this rapid increase and its diminishing performance levels would result in diminishing confidence and respect for the AP program. If more students are taking these advanced course exams, but are not faring well or are doing worse, conclusions about the effectiveness of these exams have been questioned (Holmes, 2013; Klopfenstein & Thomas, 2009). Indeed, as a result of this study, we concur that the increased participation levels have resulted in widening gaps in performance for Black and Hispanic students when compared to White and Asian students in Texas. In the end, the disparities between ethnic groups tend to favor Asian students over all other ethnic groups.

Continued issues of unequal access and performance in AP/IB programs have serious implications for the country. First, continued disparities in performance on advanced course favor Asian and White students over Black and Hispanic students. These disparities will result in unequal access to college and unequal costs associated with attending college. Finally, these disparities in unequal access to college will further manifest into unequal future economic opportunities for the fastest growing populations in the United States.

CONCLUSION

Educators and policymakers have expressed concerns that the future workforce will not meet the needs of industry. The burgeoning growth of underprepared Black and Hispanic students presents a unique challenge to educators, especially in preparation for further postsecondary education. Over the past decade, researchers have focused on AP participation levels in states with increasing Hispanic populations such as Florida, California, Arizona, and Texas to determine any inequities in performance levels. However, very few studies exist that have analyzed a decade of performance on AP/IB examinations by student ethnicity since the implementation of *No Child Left Behind* and Texas' *Closing the Gaps* legislation. Educators and policymakers should use the disparities in results by ethnic group presented in this study to review current policies and practices surrounding the use and funding of AP and IB programs and examinations. Even with recent reform efforts in education, the results from this study indicate that gaps in performance on these exams have actually widened over the past decade.

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Value-Added Imprecision

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ABSTRACT

From employment termination and pay incentives to reflections on teacher preparation programs, federalism has delineated consequences for the academic growth of students— a carrot or stick for the value teaching has added. A position of this article is that value-added measures of teacher effectiveness are less objective than presumed. Quantitative, standardized, and publicly disclosed teacher effectiveness ratings rely on student growth measuring tools with recognized distortions and inconsistencies. Extant literature on the imprecision of measuring student growth was reviewed, and the following six areas were identified: (a) construct shifting, (b) measurement systems, (c) snapshot summative assessments, (d) percentage increases, (e) student characteristics, and (f) prior ineffective teaching. The present discussion opens dialogue into equitable comparisons of effectiveness among teachers and the institutions that have prepared them for the classroom.

Keywords:

INTRODUCTION

Teacher evaluations now play a major role in school improvement (Murphy, Hallinger, & Heck, 2013). School districts in 21 states evaluate teacher effectiveness with a value-added component, or some measure of the academic advancement or worth teaching contributed (The Center for Greater Philadelphia, 2004). Value-added measures (VAM) analyze the test scores of students and estimate a teacher's effect on academic gains (Kupermintz, 2003). Price (2013) described new educational reform that "bind teacher evaluation to student test performance" (p. xv1), and for the purpose of this paper, VAM are considered measures of student academic growth that are used in any way to determine a teacher's effectiveness rating. The trend in current standards-based educational reform is for states to revise teacher evaluation systems to include measures of student academic growth in order to qualify for Race to the Top (U. S. Department of Education, 2009) funds and receive No Child Left Behind (NCLB, 2002) accountability waivers (Education Week, 2013; Herlihy, Karger, Pollard, Hill, Kraft, Williams, & Howard, 2012).

Teacher unions, teacher preparatory institutions, and other stakeholders have heeded a call to arms to secure a voice in revolutionary educational reform initiatives that incentivize highly effective teachers (Price, 2013) and publicly humiliate ineffective teachers (Darling-Hammond, 2012). An example of ardent public interest is the Los Angeles Times (2012) public database, Grading the Teachers: Value-added Analysis, which lists the names and evaluation scores of area teachers. In New York City, the teacher publicly identified as the worst teacher of the year was subjected to hounding by reporters who questioned "her lack of skill and commitment" (Darling-Hammond, 2012, ¶12). This tabloid-type treatment epitomizes Price's (2013) description of a new educational landscape where the teacher is to blame for a student's lack of academic growth. Similarly, teacher education is held responsible for the lack of effective teachers and the resulting failures of public education (Price, 2013). However, teachers and teacher preparatory programs are not the only culprits to consider.

The imprecision of tools and procedures utilized for measuring the academic growth of students distort teacher effectiveness ratings, to some degree. According to Briggs and Domingue (2011):

There is a great irony here that following a decade in which there has been a great push to increase the scientific rigor of educational evaluations of what works through an increasing emphasis on the importance of experimental designs, much of this seems on the verge of being thrown out the window in pursuit of teacher evaluations with non-experimental designs that would not be eligible for review were they to be subject to the standards of the What Works Clearinghouse. (p. 19)

Looking past test scores in New York City, for example, revealed the city's worst teacher was actually an experienced and admired teacher, a teacher with administrator support— not a bad teacher— an English as a Second Language teacher who signed up for the challenge of teaching new immigrant students (Darling-Hammond, 2012). When student growth is determined with imprecise measurement and unclear procedures and teacher ratings are

publicly compared, advantage should go to the classroom teacher whose professional reputation and livelihood are placed in jeopardy by the limitations of high-stakes teacher effectiveness ratings based on measures of student growth.

The purpose of the current position paper was to review extant literature for identified areas of imprecision in the tools and procedures used to measure the academic growth of students. The review began with background into current standard's based educational reform and included a discussion of how federal and political interests in reducing income and racial achievement disparities have increased a classroom teacher's accountability for low student growth. Following these discussions, six areas of imprecision in measuring student academic growth were identified (i.e., construct shifting, measurement system, snapshot summative assessments, percentage increases, student characteristics, and prior ineffective teaching).

BACKGROUND

In the interest of regaining America's reputation as the "best educated nation in the world" (U. S. Department of Education, 2010, p. 1), the Common Core State Standards (CCSS) reform initiative is looked to as a vehicle for improving low-performing schools. President Barak Obama noted America's falling National Assessment of Educational Progress (NAEP) ranking as one justification for the Reauthorization of the Elementary and Secondary Education Act (A Blueprint for Reform): "A generation ago, we led all nations in college completion, but today, 10 countries have passed us" (U. S. Department of Education, 2010, p. 1). Forty-five states and three United States territories (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010) have adopted CCSS. Thus, as teachers in classrooms all across America are adjusting to more rigorous, common-standards aligned instruction and assessment, teacher effectiveness is being simultaneously evaluated with an unprecedented ascendancy of student academic growth (Noell & Burns, 2006).

Systemic Academic Failures

High expectations for the academic growth of all students based on common assessments more closely aligned with the rigor of NAEP assessments would be less controversial if American students were generally performing satisfactory on current standardized assessments. However, Hoff (2009) observed the number of schools failing to make adequate yearly progress increased 28% in the 2007-2008 school year alone. In November 2012, Secretary of Education Arnie Duncan (2012) acknowledged, "Our graduation rate is unacceptable; Our opportunity gap is unacceptable; Our achievement gap is unacceptable" (para. 5). There were thousands of schools in the United States "where as few as 10 percent of students were reading or doing math at grade level" (U.S. Department of Education, June 25, 2013, para. 16). Swanson and Stevenson (2002) gives context to these epidemic failures at demonstrating adequate student academic progress with the observation that most state assessments, the measures used to determine student growth under NCLB guidelines, fell below NAEP proficiency standards.

Confronting widespread failures in meeting outcome-based academic growth requirements, the Obama administration began granting waivers to exempt states from NCLB accountability (Education Week, 2013). The Secretary of Education called the 2014 NCLB deadline for grade level proficiency of all students lofty and not credible:

Faced with meeting a utopian goal, too many states took the easy path. They dummed-down their standards to make it look like more students were proficient. And too many schools—like those that we are honoring tonight—that were successfully educating black, brown, and poor children, and were actually closing achievement gaps, were labeled as failures. (Duncan, 2012, para. 10)

An Urgency for Reducing Achievement Gaps

Reducing racial and income disparities in academic achievement has become the new focus of educational reform: "Contrary to what you may have read, these waivers will push states to dramatically accelerate achievement and attainment for disadvantaged students and students of color" (Duncan, 2012, para. 10). Groups such as African American race, low income (free and reduced lunch status), and special education populations were counted as subgroups in NCLB formulas for determining the adequate yearly progress of—not teachers—but schools, school districts, and states. The new ambitious and achievable goal of reducing racial and income disparities by 50% "takes account of the fact that some students start far behind their more privileged peers" (Duncan, 2012, para. 19). According to Duncan (2012), the NCLB held only 20% of schools accountable for the academic growth of African American students, in comparison to the 99% of schools held accountable under new legislation. Duncan's (2012) accountability percentage is based on signature educational reform legislation of the current administration (U. S. Department of Education, 2009; 2010) that require effective teachers to evidence academic growth for all students in their classrooms.

Do new educational reform initiatives actually call for greater accountability? If it was so easy for states to game the system (Duncan, 2012) and show acceptable student growth under previous legislation, why would NCLB

goals be seen as so lofty and unattainable that 41 states requested waivers from NCLB accountability targets calling for the grade-level proficiency of all students (Education Week, 2013)? A more harmful utopian notion than NCLB's 2014 goal of 100% of students being proficient in math and reading (Education Week, 2013) may be the assumption that no racial or economic academic achievement gaps would exist in America if all classroom teachers were highly effective.

Blaming the Teacher

Whereas the NCLB held state, district, and school consequences for low and falling school performance scores, teacher evaluation systems based on measures of student growth have increased the classroom teacher's burden of accountability for low-performing students (e.g., at-risk, English-learners, minority, special education, and low-income). Teachers have been terminated for one year of low student growth, even when they evidenced student growth in previous years (Darling-Hammond et al., 2013). In *Good Teachers can be Fired for Bad Math*, Downey (March 23, 2012) observed Florida, for example, will fire and revoke the teaching licenses of "teachers with two years of ineffective rankings...thus banning them from teaching in any other public school in the United States" (para.7).

The problem of low-performing subgroups, evidenced under NCLB guidelines as low school and district performance scores, have persisted through years of concentrated state, district, and school efforts, and this problem is unlikely to be solved by effective teachers alone. Why is it assumed that concentrating on the administrative task of teacher evaluations will "accomplish what reformers hope" (Murphy, Hallinger, & Heck, p. 1)? Numbers, proportions, and ratings may change, but the academic growth of low-performing subgroups will not improve simply by holding teachers, rather than districts or states primarily responsible. Teachers teach standards, "standards will not teach themselves" (Klein & Rice, 2012, p. 62), and effective interventions for unsatisfactory academic progress require considerably more support than simply raising the academic bar.

Oversimplification of the multi-leveled, cross-disciplinary, complex societal challenge of the unsatisfactory academic growth of low-performing subgroups epitomizes a silver bullet mentality of educational reform—pre-packaged, top-down solutions that detract from authentic, sustainable progress (Klein & Rice, 2012). Narrowly focusing on teacher effectiveness as a root cause of systemic academic failure inhibits development of appropriate interventions and intense instructional supports, such as increased one-on-one and small group tutoring; social work and behavioral interventions; high-yield materials, including computers and software; specialized programming (e.g., phonics-based reading instruction for older students); and supports and supplementary aids for special needs.

Blaming teachers for low student growth is inherent in evaluation systems where a teacher's contribution to student learning is represented by one rating label that is used to predict and compare teacher effectiveness. Not all teachers have the same assignment and what is needed with this year's students is not the same as what was needed last year and what will be needed next year. Darling-Hammond, Amrein-Beardsley, Haertel, and Rothstein (2013) observed variability in year-to-year teacher effectiveness ratings and questioned the premise of "a stable teacher effect that's a function of the teacher's teaching ability" (p. 12). Similarly, in observations of conditional teacher effectiveness and the student's role in an interactive learning process, Ding and Sherman (2006) questioned "the search for one-size-fit-all kind of teaching effectiveness" (p. 46). In the following section, six areas of imprecision in the tools and procedures used for measuring the student growth that determines teacher effectiveness ratings in VAM evaluations were identified.

VAM IMPRECISION

CONSTRUCT SHIFTING

Students often repeatedly cover the same course or content area, but they are learning different constructs in different grade levels. Construct shifting refers to changes in content focus across grade levels, "such as when mathematics assessments move from testing arithmetic skills in third grade to testing pre-algebra and geometry skills in later grades" (O'Malley, Murphy, McClarty, Murphy, & McBride, 2011, p. 5). Martineau (2006) observed, "If value-added accountability models are to be used on vertically scaled data, new methods of assuring that minimal construct shift occurs are imperative" (p. 58). Student learning varies because learning rate is not necessarily similar (even for the same student) across constructs because students do not repeatedly learn the same constructs or skills. Value-added evaluations that compare a student's learning rate with one teacher to a normed rate by content or compare it to the student's past growth rate assume similar learning rates across constructs. According to Martineau (2006), approaches for assuring minimal construct shifting include, "reporting student scores on the various score scales within subject matter rather than reporting only a single combined general math, general reading, and/or general science scale" (p. 58). Tools for measuring student achievement, however, are typically by the more general grade-level content.

MEASUREMENT SYSTEM

Teacher effectiveness ratings differed for the same teacher by the sensitivity of analyses (Briggs & Domingue, 2011) and by the model selected (Di Carlo, 2012; Harris, Sass, & Semykina, 2010; McCaffrey, Lockwood, Koretz, & Hamilton, 2004). A critical review of a Los Angeles Unified School District's (LAUSD) analysis of teacher effects on student performance was conducted (Briggs & Domingue, 2011). A guiding question was whether teacher effects were successfully isolated. When the LAUSD data were re-analyzed with measures for greater sensitivity (i.e., student scores over a longer period of time, the influence of peers, and school-level variables), "only 46.4% of teachers would retain the same effectiveness rating" (Briggs & Domingue, p. 5). Teacher evaluation ratings also varied according to which tests were included in a selected model (Di Carlo, 2012; Papay, 2011). Student growth scores differ even among instruments aligned to CCSS because (a) tests assign different weights to constructs, (b) larger and smaller proportions of specific constructs (e.g., computation or higher order prompts) are included and excluded differently among assessments, and (c) tests combine constructs in varying ways within testing domains.

Common Core State Standards are standard across states, but how much weight the student academic growth component is given in teacher evaluation processes differs among states. Hypothetically, then, a teacher with the exact same student characteristics and student growth scores—gathered with the same instruments and analyzed exactly the same—could receive different effectiveness ratings in different states.

STUDENT CHARACTERISTICS

The academic growth of students varies by student characteristics and by grade level (Briggs & Domingue, 2011; Capraro, Young, Lewis, Yetkiner, & Woods, 2009; Deno, Fuchs, Marston, & Jongho, 2001). Darling-Hammond (2012) found teacher effectiveness, as determined by student growth, continued to vary according to student characteristics even when controls were applied for student differences. In particular, teacher gains were lower with new English-learners and special education students than with typical students (Darling-Hammond, 2012). Deno et al. (2001) determined that students with disabilities learned new words at less than half the growth rate of typical students. According to Harris et al. (2010), teacher effects are highly sensitive to the mis-specifications and assumptions regarding student/family effects (i.e., time-constant versus trending). With recognition of the instability of effectiveness ratings, Darling-Hammond (2012), once a bullish supporter of VAM, observed, "Test scores reflect whom a teacher teaches, not how well they teach" (¶14).

Teacher effectiveness ratings are compromised by stacking a class with harder to teach, harder to reach, lower performing students because teacher effectiveness ratings vary according to student characteristics. The biggest educational risk of determining teacher effectiveness by student growth is penalizing and discouraging teachers from taking those difficult assignments where student growth is predictably lower than that of average students (Darling-Hammond, 2012).

SNAPSHOT SUMMATIVE ASSESSMENT

Evaluating the effectiveness of every teacher with a one size fits all summative measure of student performance (i.e., proportion of students scoring proficient on state assessment, one standard percentage-point growth for all students) is similar to a medical analogy of evaluating all hospitals on one patient outcome (i.e., survival). Trauma and high-risk specializing centers, analogous to instructional settings that serve students with special learning needs, can be labeled unacceptable in evaluation systems based on a single-snapshot, outcome-based measure because variations in the conditions of the patient upon arrival is not a factor. Teachers should be expected to improve student skills from individualized, pre-instructional performance levels—not from a theoretical grade level standard of where the student should be functioning. Teachers should not be penalized for failing to bring students multiple grade levels below grade level proficiency at the beginning of the year to a summative, standardized proficiency level by year's end.

According to O'Malley et al. (2011), inaccurate student growth models measure change in proportions of students meeting proficiency compared to a set proficiency level or proficiency levels of different cohorts; whereas, accurate growth models compare score changes from the same student over time. Teachers are best able to evidence the value teaching has added to student learning by taking the academic pulse of individual students when they enter the classroom and by projecting learning targets on the same pre-test constructs from those initial baselines. Yet, as noted earlier, comparing a student's learning rate this year to his or her learning rate last year or projecting an individualized learning rate for next year is not precise because different constructs are being learned at each grade level.

PERCENTAGE INCREASE

Teacher performance ratings based on objective percent point increases in academic growth are not always fair. Increasing the percentage growth required for all students across the board or individualizing growth rates do not

remedy all concerns, however, because the fundamental question of percentage increase remains. Adequate yearly progress and school performance scores held similar dilemmas— a greater difficulty to sustain and improve growth at highest levels and a distortion in meaningful growth at lowest levels. One option is to project growth with larger percentages for higher achieving students. Yet, according to Darling-Hammond et al. (2013), “Teachers of gifted students show little value-added because their students are already near the top of the test score range” (p. 12). Another option for making standardized percentage increases more equitable is to project individualized percentage-point increases determined from a rate of growth for individual students gathered from the student’s previous assessment history. However, is learning 100% more words, for example, from one word to two words, as meaningful as jumping from 100 to 200 words, and is equating these two examples of 100% increases in academic growth fair?

PRIOR INEFFECTIVE TEACHING

The long-term residual effects of prior ineffective teaching play a part in subsequent student gains. In other words, this year’s teacher can be penalized by the ineffectiveness of last year’s teacher. According to Sanders and Rivers (1996), “Teacher effects are both additive and cumulative with little evidence of compensatory effects of more effective teachers in later grades” (p. 6). How can Sanders and Rivers (1996) classic study on the importance of effective teaching also support the imprecision of determining teacher effectiveness by student growth? Effective teaching is vitally important because a “near-permanent retardation of academic achievement” (Sanders & Rivers, 1996, p. 7) was determined to be present in students who experienced a multiple year sequence of ineffective teaching. At the same time, prior ineffective teaching jeopardizes the effectiveness rating of this year’s teacher because the residual effects of ineffective teaching remain “measurable two years later, regardless of the effectiveness of teachers in later grades” (Sanders & Rivers, 1996, p. 6).

DISCUSSION AND CONCLUSION

Utilizing one-size fits all measurements of student growth as dominate factors in teacher evaluations has issues yet to be resolved, but it is not the intent to imply value-added measures are meaningless in determining teacher effectiveness (DiCarlo, 2012). Long-standing educational research have made it clear teachers do make a difference (Sanders & Horn, 1998; Sanders, Wright, & Horn, 1997). According to Sanders, Wright, and Horn (1997), “the most important factor affecting student learning is the teacher” (p. 63). However, finding teacher effectiveness the strongest predictor of student growth is not the same thing as assuming a teacher is not effective if he or she did not exert a given amount of academic growth for all students— in all grade levels assigned, for all skills taught, and in all teacher evaluation models— every year.

The principal supervises teacher evaluations in the scaffold hierarchy of performance management systems (Murphy, Hallinger, & Heck, 2013), but principals would do better to focus on other factors within their control (e.g., academic vision and mission, organization goals, student opportunity, school culture) for improving instructional quality. Optimistic conclusions regarding a teacher’s influence on student learning have been made and there is a growing emergence of teacher evaluation models with measures of student growth, but caution “in accepting claims about the ability of teacher evaluation to power significant school improvement” (Murphy et al., 2013, p.3) is recommended. Good questions for principals of schools in need of turn around to ask are, “What is to happen with low-quality teachers? ... Where is the reservoir of high-quality teachers waiting in the wings?” (Briggs & Domingue, 2011, p. 20).

Existence of educational improvement’s central player on the federal stage— a consistent, standard measure of teacher effectiveness— has been legitimately questioned (Darling-Hammond et al., 2013; Ding & Sherman, 2006; Harris et al., 2010; McCaffrey et al., 2004; McCaffrey, Lockwood, Mihaly, & Sass, 2010). Classic educational research has established that the effects of ineffective teaching lasts at least two years (Sanders & Rivers, 1996), but teachers are being terminated, rather than trained, after two years of failing to demonstrated acceptable student growth (Downey, March 23, 2012). Low-achieving students have been shown to affect the performance ratings of teachers, even with controls for student differences (Darling-Hammond, 2012). The assertion that teacher effectiveness ratings are not linked to “classroom demographic variables such as gifted and talented status, special needs, ELL status and poverty” (Briggs & Domingue, 2011, p.19) was not supported by sensitivity analysis. It follows, with the imprecision involved in determining teacher effectiveness, the ability of the effectiveness of teachers to close achievement gaps is questionable.

An aim of the current review was to open dialogue into the standardized quantifying of teacher effectiveness. Practical implications are held for informing equitable comparisons of effectiveness among teachers and the teacher preparatory institutions that trained them.

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A Case Study of Academics' Epistemic-Pedagogic Identity in the Context of Higher Education

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ABSTRACT

The paper explores a PhD study, conducted recently about academics' epistemic-pedagogic identity. Specifically, the paper explores three research questions. (1) How does theoretical and empirical research link the epistemological and pedagogical constructs of academic identity? (2) How do different academics experience neoliberalism in relation to their epistemic-pedagogic identities? (3) How can epistemic-pedagogic identities critically develop and engage with epistemic climates? The research engaged these questions using a single case study of academics (n = 70) in a higher education institution in Auckland New Zealand. Data collection involved documentation collection, surveys, semi-structured interviews and artefact collection.

The purpose of the research was to represent and interpret diverse academics' responses to the epistemic drift in higher education. The researchers' study offers a small but potentially significant contribution to academics' professional development to now share with the global environment.

Keywords:

RESEARCH AIMS AND OVERVIEW

Beliefs about learning and teaching are related to how knowledge is acquired, and in terms of the psychological reality of the network of individuals' beliefs, beliefs about learning, teaching and knowledge are probably intertwined (Hofer & Pintrich, 1997, p. 116)

In the neo-liberal academy, under the spotlight of audit and the exigencies of bureaucracy, there is a sense that academic identity is ruined, that the sort of work academics want to do and feel committed to doing is becoming harder to undertake with any real ownership, joy or pleasure (AIC, para. 1. <http://aic.education.auckland.ac.nz/call-for-papers/>)

This paper outlines the research explored by a PhD research student who is also a senior academic who explored academic identity in higher education. Conceptually, the PhD research focused on the relationship between (a) academics' ways of knowing and beliefs about knowledge (i.e., personal epistemology), (b) academics' ways of teaching and beliefs about teaching (i.e., personal pedagogies), and (c) the 'epistemic drift' represented by in higher education. Specifically, the research utilised an ethnographic case study to explore the relationship between these three constructs (i.e., epistemology, pedagogy and higher education). The purpose of the research was to represent and interpret diverse academics' responses to the epistemic drift represented by higher education, often called neoliberalism. As Boote and Beile (2005) note, 'neoliberalism and education researched collectively will advance the importance of educational issues' (p.11). The research offered a small but potentially significant contribution to academics' professional development in the author's institution and the broader dialogue on the role of academics and higher education in the modern world.

Until recently, academics' personal epistemology received very little theoretical or empirical attention (Chan & Elliot, 2010). Recent research (e.g., Brownlee, Purdie, & Boulton-Lewis, 2001; Schraw & Olafson, 2008; Tsai, 2002) highlights a relationship between ways of knowing and beliefs about knowledge (epistemology) on the one hand and ways of teaching (pedagogies). A theoretical assumption that is increasingly borne out by empirical research is that academics' ways of knowing and beliefs about knowledge are intricately related to their ways of teaching. Researchers in epistemology (e.g., Brownlee, 2001: 2004; Fang, 1996; Richardson, Anders, Tidwell, & Lloyd, 1991) argue that a focus on academics' beliefs about knowledge can inform more effective teaching and learning in higher education. Thus, an exploration of the relationship between epistemology and pedagogy can inform the debate over such pedagogies as guided instruction, direct instruction, discovery learning, critical thinking, constructivism, and authentic

pedagogy. However, this exploration could not be undertaken without consideration of individual academics' identities in the context of the ever-changing role of the institutions within which they work within the broader socio-cultural milieu. Therefore, this ethnographic case study was contextualised within a well-recognised movement in higher education – neoliberalism.

While a necessarily ill-defined concept in the social sciences (Mudge, 2008), *neoliberalism* is essentially an ideology of increased productivity through government deregulation, privatisation, managerialism and marketisation. It is a set of economic policies that have become widespread in western countries, well beyond its economic origins (Martinez & Garcia, 1998). As any ideology, it represents a way of knowing and has an 'epistemic identity' that is present in its ways of doing. For example, Berry (2008) identifies neoliberalism with 'knowledge structures of empiricism, rationalist scientism and productivity' (p. 8), 'hard-and-fast quantification' and 'rubrics of efficiency and standardization' (p. 6) and argues that 'the dominant knowledge system is indissociable from the neoliberal agenda that facilitates it' (p. 3). Hunter (2002) associates neoliberalism with a positivist epistemology. Caffentzis (2004) identifies neoliberalism with the 'commodification, privatisation and marketisation' of knowledge. Elzinga (1985) and Henkl (2005) identify the 'epistemic drift' towards neoliberalism in academia with 'externally defined rules and evaluative criteria, utility and value for money, as well as scientific excellence (p. 167). Some researchers have noted that academics are experiencing 'distress and disillusionment' (Davies & Petersen, 2005) and 'alienation and anomie' (Beck & Young, 2005; Archer, 2008) as a result of epistemic change in a period of neoliberalism. Such claims warrant further empirical and contextualised exploration of individual academic's ways of knowing and teaching within the broader 'epistemic climate' (Haerle & Bendixen, 2008) of higher education.

RESEARCH QUESTIONS

The research engaged three primary questions in the context of a case study:

1. How does theoretical and empirical research link epistemological and pedagogical constructs of academic identity?
2. How do different academics experience neoliberalism in relation to their epistemic-pedagogic identities?
3. How can epistemic-pedagogic identities develop to engage more adaptively but critically with epistemic climates in the changing academy?

BACKGROUND AND RELEVANCE OF STUDY

Beliefs about knowledge are related to effective pedagogy and learning. Hofer (2008) states, 'in our mundane encounters with new information and in our sophisticated pursuits of knowledge, we are influenced by the beliefs we hold about knowledge and knowing . . . we need better understanding of personal epistemology and its relation to learning' (pp. 3-4). This statement offers a general rationale for the research, which addressed the epistemic dimension of academic identities during a period of rapid change in higher education.

The international discourse on higher education notes the sweeping changes affecting the sector. These changes are often associated with a broader ideological movement known as 'neoliberalism' (Peters, 1996). For example, a conference on Academic Identities (University of Auckland, June 2012) offered the following summary:

Research/scholarship about the changes and challenges to academic work and identities is everywhere now. In the neo-liberal academy, under the spotlight of audit and exigencies of bureaucracy, there is a sense that academic identity is ruined, that the sort of work academics want to do and feel committed to doing is becoming harder to undertake with any real ownership, joy, or pleasure. (<http://www.aic.education.auckland.ac.nz/assets/Call-for-Papers-AI-2012.pdf>)

What epistemic-pedagogic identities does this characterisation represent and how, if this representation is accurate, can affected academics construct meaningful, 'positive', academic identities? How did this study impact the student researching academics' identities?

Understanding different academics' epistemic-pedagogic identities can inform teaching and practice in higher education contexts. For example, curriculum content in tertiary teaching training programmes (e.g., Post Graduate Certificate in Tertiary Teaching; Graduate Diploma in Higher Education) can help new academics to explore their own epistemic-pedagogic identities in relation to their teaching, their interactions with academics from different fields and their institutional identity. A place for open and informed reflection on academic identity seems especially important in the current context of higher education, which some (e.g., Archer, 2008; Bleiklie, Hostaker, & Vabo 2000; Elzinga, 1985; Henkel, 2005) have characterised with labels such as 'neoliberalism' and 'epistemic drift'. Failure to address the epistemic construct (dimension) of academic identity and its relationship with the pedagogical dimension can exacerbate epistemic conflict among academics and between academics and their broader institutions (Bleiklie, Hostaker, & Vabo 2000). The research represented an ethnographic case study between epistemology and pedagogy

in the construction of academic identity in one tertiary institution in New Zealand.

OVERVIEW OF KEY LITERATURE

This section contains a brief summary and analysis of key literature related to academic epistemic-pedagogic identity and neoliberalism. A growing body of literature (e.g., Elzinga, 1985; Archer, 2008) acknowledges an 'epistemic drift' (Elzinga, 1997) towards neoliberalism in higher education that has a significant impact on academics' identities (Henkel, 2005). Much commentary (e.g., Bleiklie et al., 2000) depicts this drift pejoratively in terms of bureaucratisation, economic rationalism and micro-managerialism. The research conducted explored the epistemic-pedagogic constructs of academic identity within the neoliberal milieu of higher education. It represented a case study and conceptualisation of the relationship between 'epistemic drifts' (e.g., neoliberalism) and individual academic identities.

EPISTEMIC IDENTITY

Educational researchers have long been interested in the role of epistemic beliefs in learning and academic achievement. Epistemic beliefs refer to beliefs about knowledge (including its structure and certainty) and knowing (including sources and justification of knowledge) (e.g., Buehl & Alexander, 2001; Duell & Schommer-Aikins, 2001; Hofer, 2000; Hofer & Pintrich, 1997; 2002). Epistemic beliefs include beliefs about 'the definition of knowledge, how knowledge is constructed, how knowledge is evaluated, where knowledge resides, and how knowing occurs' (Hofer, 2001, p. 355). There are several conceptualisations of epistemic beliefs. Early research tended to see epistemic beliefs as domain-general (e.g., Baxter Magolda, 1992; Belenky, Clinchy, Goldberger, & Tarule, 1986; Kitchener & King, 1981, 1990; Kuhn, 1991; Kuhn & Weinstock, 2002; Perry, 1970). Thus, epistemic beliefs were thought to influence the treatment of knowledge across contexts or domains in a fairly uniform fashion, although researchers working within these frameworks conducted studies largely in academic settings and in regard to academic knowledge. Most theorists (e.g., Buehl & Alexander, 2005; DeBacker & Crowson, 2006) described developmental changes in epistemic beliefs with stage-like descriptions. Although there is a general consensus on the content, sequence and direction of 'epistemological development' these descriptions demonstrated some differences and variance in (1) the number of stages (e.g., as few as four [Baxter Magolda] or five [Belenky et al.] to as many as nine [Perry]), and (2) the characterisation of stages (e.g., as intellectual and ethical development [Perry], epistemological reflection [Baxter Magolda], reflective judgment [Kitchener & King, 1981], or as argumentative reasoning [Kuhn]). Researchers used interviews and laboratory tasks to reveal the nature of epistemic beliefs and their development. Such studies focused on students' learning and beliefs and tended to use quantitative analytical techniques.

Perry's (1970) work (derived from a developmental perspective) with Harvard male students is most often cited as the beginning of the study of personal epistemology. His findings can be linked to subsequent major studies that show that personal epistemological beliefs can develop along two lines: (1) sources of knowledge and (2) nature of knowledge. Persons who are new to studying a subject are deemed to be less mature in the field and therefore situate themselves as having beliefs that rely on expert knowledge, which is viewed as simple and black and white. But this outlook changes as the person develops and matures. The person comes to acknowledge that the source of knowledge is within the self and therefore is relatively uncertain and evolving (Hofer & Pintrich, 1997; Schommer, 1990; Belenky, Clinchy, Goldberger, & Tarule, 1986; King & Kitchener, 1994). A final stage or phase tends to appreciate the relation and contextual nature of knowledge and knowing and is characterised by a sort of 'commitment in relativism' (Perry, 1970). This development is often described in terms of Kuhn and Weinstock's (2002) research on the subjective/objective distinction. As summarised by Leah et al (2010):

The absolutist sees knowledge from an objective perspective, the multiplist takes a subjective view, and finally, the evaluativist achieves a mature balance of the two, coordinating a personal and subject frame of knowing with an awareness of how knowledge can be verified (p. 222-223).

More recent theorists have conceptualised epistemic beliefs as a set of beliefs about knowledge and knowing. Each of these beliefs has its own developmental trajectory, and the trajectory may vary across the range of individual epistemic beliefs (Schommer, 1990; Schraw, Bendixen, & Dunkle 2002; Wood & Kardash, 2002). In addition, some researchers suggest that epistemic beliefs may be domain- or discipline-specific rather than general (e.g., Buehl, Alexander, & Murphy, 2002; Hofer, 2000; Jehng, Johnson, & Anderson, 1993; Paulsen & Wells, 1998; Schommer & Walker, 1995). Theorists working from this multidimensional understanding of epistemic beliefs have developed paper and pencil self-report measures that assess a variety of epistemic beliefs.

There is growing consensus that some of the beliefs originally included in measures of epistemic beliefs are not, themselves, epistemic in nature (Bendixen & Rule, 2004; Hofer, 2000; Hofer & Pintrich, 1997). Hofer (2000) and Pintrich (2002) have suggested that epistemic beliefs include beliefs about knowledge (the simplicity and certainty of knowledge) and beliefs about knowing (source and justification of knowledge) but not beliefs about learning or the nature of ability. Schommer-Aikins (2004) recently made a similar distinction, separating beliefs about knowing (e.g.,

fixed ability, quick learning) from beliefs about knowledge (e.g., knowledge is simple and certain). The research drew on general constructs from the consensus of theory on epistemological development (e.g., subjective/objective; universal/relative; interpretivist/positivist distinctions) to explore academics' personal and professional domains of knowledge and knowing, whilst the researcher examined her own position. .

PEDAGOGICAL IDENTITY

Pedagogical identity and style are well-researched constructs in educational literature. For example, the Teaching Practice inventory used by Mosston represents a typical inventory of styles, which are more often cast in broad epistemic-pedagogic oppositions between construction and transmission (e.g., Teo, Chai, Hung, & Lee, 2008; Wong, Chan, & Lai, 2009) of knowledge and learning.

Research in the area of pedagogical beliefs tends to focus on school teachers and pre-service teachers' beliefs. For example, pre-service teachers' relativistic epistemic beliefs have been connected with constructivist pedagogical beliefs. Schraw and Olafson's (2008) study found that 23 of 24 practicing teachers held constructivist-oriented pedagogical beliefs and relativistic epistemic beliefs. Chan and Elliot's (2004) research showed that pre-service teachers in Hong Kong were epistemically relativistic, but did not demonstrate an inclination towards constructivist pedagogies. However, Richardson (2003) suggested that although pre-service teachers might express a relativistic epistemic belief, they might also view teaching as knowledge transmission. The evolving field reveals the complex relationships and dynamics between ways of knowing and ways of teaching that influence practice.

While much early research focuses on either students' epistemic identity or teachers' pedagogical identity, more recent research has begun to draw attention to the relationship between teachers' ways of knowing and ways of teaching, arguing that the two constructs relate to each other (e.g., Pajeres, 1992; Brownlee, 2004; Sinatra & Kardash, 2004). However, the relationship between epistemic and pedagogical identity needs more attention. Furthermore, it needs attention in relation to academic identities, as distinct from (though possibly very similar to) teacher and pre-service teacher identities. This research focused on academic identity in a higher education context in New Zealand. This paper overviews the research conducted and the conference paper intends to highlight the student experience, whilst this research was carried out. This would include supervisory roles, contact arrangements and an overview of the student experience.

GAP IN THE RESEARCH

The premise of the research was that individual identities are iteratively constructed, deconstructed and reconstructed in relation to each other and to more general epistemic climates. The nexus between epistemology and pedagogy was yet to be explored directly in relation to academic identity in a neoliberal context. More empirical investigations and conceptual models that represent these intersections and relationships were needed. Such a model can be used to conceptualise (a) the existence and nature of interaction between personal epistemology and pedagogical praxis, (b) the existence and nature of epistemic-pedagogic conflicts and cooperations between different academics, and (c) the existence of epistemic-pedagogic conflicts and cooperation between individual academics and their institutions. As stated previously, an understanding of these relationships are important in the light of current neoliberal changes in higher education that influence academic identities.

RESEARCH DESIGN

The case study used a qualitative ethnographic approach (Cresswell, 2012) framed within the research paradigm of critical realism to explore academics' epistemic-pedagogic identities. Previously, much epistemological research has been conducted through quantitative studies using numerical data. However, as Hofer (2008) notes, simplified quantitative measures based solely on questionnaires may risk trivialising the complexity of individuals' beliefs and 'assessment has been most reliable and valid with interviews' (p.7). Figure 1 represents main elements of the research design within the research paradigm of critical realism. Figure 2 shows the data collection phases connected to the main themes.

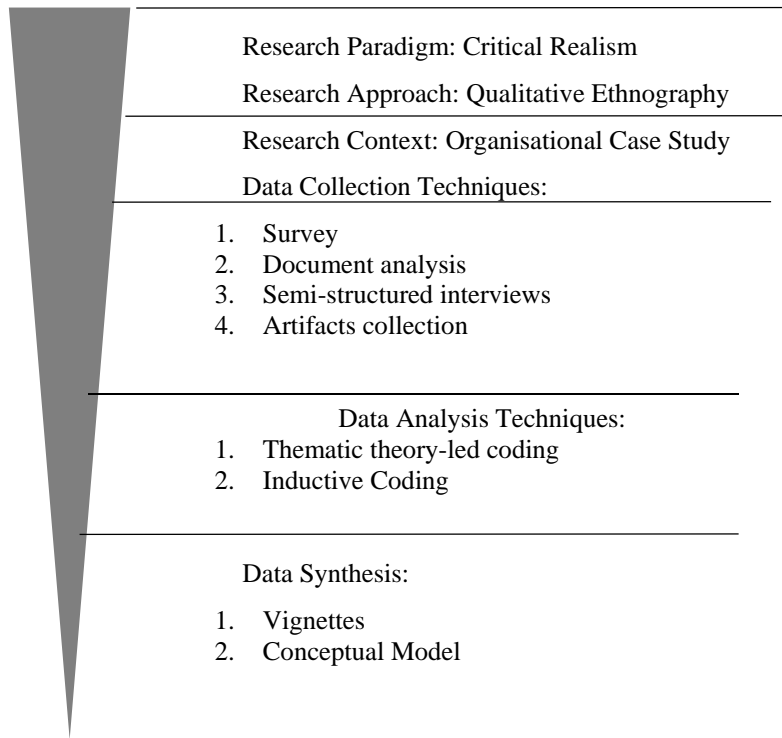


Figure 1. Overview of Research Design

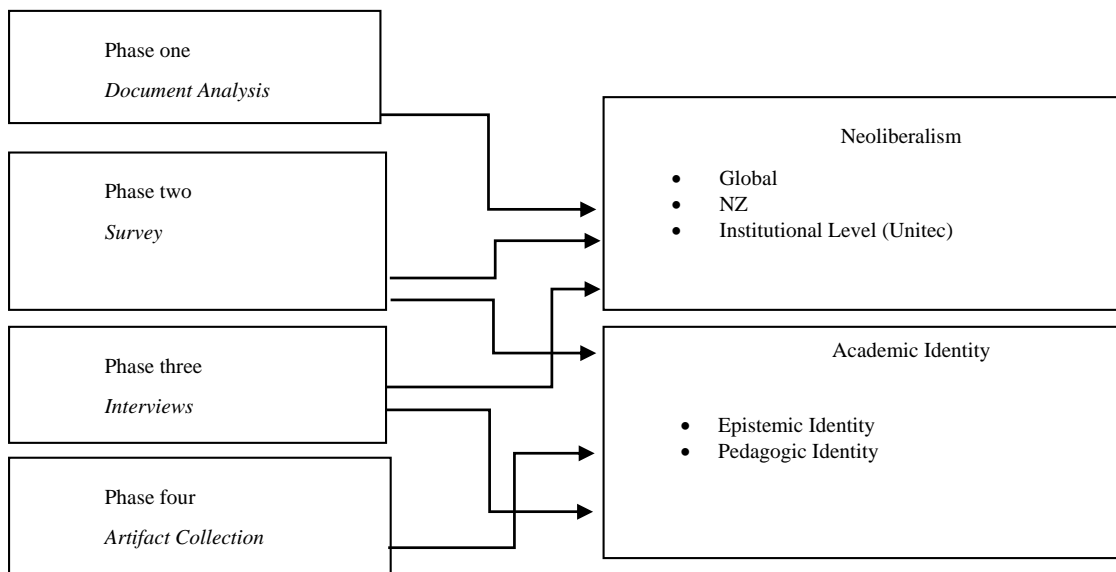


Figure 2. Triangulation and Data Connection.

CONCLUSION

There were some ironies and paradoxes for the researcher in carrying out this research within the institution she worked and whilst being an academic herself. Alongside this many binaries became exposed, for example, student/academic; known/unknown; subjectivity/objectivity. Terms used in epistemology, and connections to her own teaching were written about in her journal as her student experience progressed. Her ability to practice reflexivity became paramount. Revealing her own academic identity has been a satisfying but at times an interesting and also moving journey, as both a student and an academic within the higher education sector. The *neoliberal effect* was the biggest part of the data arising from discussions with participants. The impact of epistemic drift has been described as mainly pejorative, the researcher coining what is happening in higher education as a **LOUD** *disquiet*.

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Perceptions of Undergraduates' about Ethical use of Computer & Internet

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ABSTRACT

Computer and internet has brought innovative changes in education all over the world. In the universities of Pakistan, computer and IT related courses have recently been included as compulsory subjects in all disciplines at undergraduate level. Therefore, it was important to know the perceptual understanding and awareness of university teachers and undergraduate students about the ethical use of computer and internet through a survey. Total 378 teachers and 643 students from four different universities participated in the study and the results were interpreted on the bases of their demographic information. Overall, the results were not very highly appreciated regarding the awareness about computer and IT ethics. But teachers from private sector universities and male students from both private and public sector universities were found perceptually more positive than to others. It was recommended that computer ethics awareness training is needed for all the stakeholders of all universities.

Keywords:

INTRODUCTION

Ethics is the question of right and wrong in human conduct ^{[4][14]} and computer ethics are the ethics regarding the use of computer and IT ^[19]. In the same context [28] explained that 'computer ethics deals with how to make moral decisions while using technology whether in workplace or in society in general'. Advancement in information and communication technologies (ICTs) has empowered the users and their frequent accessibility and utilization increased the chance of unethical use of these resources. These unethical uses may harm individuals or even societies. These activities may include hacking, spam, denial of service attacks, identity theft, unauthorized duplication of software, digital plagiarism and improper uses of digital resources ^{[3][21][5][16][1]}.

According to [10], 'ICT received a significant amount of attention from ethicists as well as sociologists, anthropologists, and scholars in law, education, and communication studies. Recently, computer ethics broadened to ethics of information technology and information ethics, a more general field that includes computer ethics, media ethics, library ethics, and bio-information ethics'. Computer and IT ethics studies have been conducted in developed countries; however under developed countries are in the process of identifying the importance and role and establishing the culture about the ethical use of computer and IT. Pakistan is one of the under developed countries where Government is spending a significant amount of resources to improve the quality of education at all levels but especially at higher educational institutions. There have been many significant developments and changes in teaching and learning techniques and resources. It was surveyed by Jamil and Shah in 2011 that teachers are preparing lectures and notes (i.e., by downloading materials from internet), constructing question papers online, emailing assignments online, online marking of assignments and answer sheets, declaring students results online, using email to send and receive feedback to/from students and also providing CDs and web links related to course content to students in the classrooms. Basic IT resources i.e., computer, printer and internet are provided to all teachers in their offices. Each department / or discipline has their own computer lab for students. Moreover, trainings are being provided to teachers and students to utilize these resources effectively by the Higher Education Commission, Pakistan. Recently, all public and private sector universities have included compulsory courses related to the training of computer and internet in all the disciplines of undergraduate studies. This increased use of computer and internet across the curriculum compels our teachers and students to be knowledgeable about computer and IT ethics.

Therefore, this paper will focus on the particular issues associated with the ethical use of computer and information technologies (C&IT) by the undergraduate teachers and students of the sampled universities. Many of the ethical issues related to the use of C&IT raised in the paper were applicable to the teaching - learning activities that require sound knowledge and professional understanding – in the absence of which – may have negative impact on

learning. By addressing computer ethics within the context of teaching profession, not only expose the level of awareness among the teachers and students but will also bring attention of higher authorities to train teachers and students in this particular direction as well, so that the C&IT resources provided by the government could be utilized properly and effectively.

LITERATURE REVIEW

Iskandarani, El-Refae and El-Etter^[11] critically explained that internet – in the very beginning – has two simple rules i.e., anyone could say anything and nothing was official. This was the best method of finding solid solutions for technical problems. But it was miss-interpreted and now there are networks, forums and websites where anarchy reigns. These were categorized and explained by [21] which presented architecture for teaching computer ethics online. They quoted from Forester and Morrison the following seven categories of unethical uses or abuses of ICTs: computer crime and computer security, software theft and intellectual property rights, computer hacking and creating of viruses; computer and information systems failure; invasion of privacy; the social implications of artificial intelligence and expert systems; and workplace computerization. To handle these problems, authors suggested for identifying the meaning of computer and IT ethics by the users; discuss ethical problems by considering each other's point of view; then explain the ethical problems in terms of real life problems; create a situation for them and then analyze how they would be able to provide the solution of the problem.

Regarding computer or IT ethics' applications in education different authors expressed and analyzed differently. For example; there are misconceptions about copyright laws and ethical issues regarding the use of computer among students, therefore, it would be effectiveness to include this in curriculum^[25]; it was confirmed^[22] added that computer and IT are widely being used in educational settings, it seems reasonable and necessary to include computer and IT ethics in curriculum; related to these two papers, it was studied the differences between plagiarism acts from printed sources and internet sources^[2]. They revealed that the students were unable to distinguish printed and internet sources because they perceive the information on the internet as free for use. In this regard they suggested treating potential information sources separately in research, in order to gain a full understanding of the phenomenon. They highlighted: a) perfect students' insights regarding the ethical use of online information; b) teach them how to cite internet sources properly and c) explain the importance of protecting intellectual property rights. By doing so, universities can reduce the extent of plagiarism, and particularly internet plagiarism, committed by students; students from different disciplines are using computers as research tools and to communicate with friends and colleagues^[3]; therefore, it is very to educate them meaningfully to use these resources effectively and properly; students' ethical attitudes were surveyed towards computer use, it was found that the median rank for all activities is in the range of somewhat unethical to very unethical^[17]. Personal use of software or downloads was judged more as being just somewhat unethical as was hacking into a computer system for reasons of intellectual curiosity. Malicious activity was judged primarily in the unethical to very unethical range. Accessing other peoples records, changing code for personal gain and causing reduced response time for a company that was believed to exploit its workers and was unfriendly to the environment was viewed no more negatively than the same activity performed without malicious intent. On the other hand, teaching of computer ethics to students will raise the awareness and understanding among them which will ultimately affect the effective utilization of computer and IT tools^[12]; it was highlighted and focused the computer ethics in higher educational institutions and found that plagiarism, copyright and software theft, hacking^[5], improper use of computer resources, and harassment are the common unethical practices among teachers and students and a studies in which elementary and middle school students and undergraduate students were involved^[26]. He found that students believe that software piracy is legal.

RESEARCH QUESTIONS

Following research questions were formulated to conclude the study:

- Q1: whether sampled teachers and undergraduate students have same ethical believes?
- Q2: whether sampled teachers in Public and Private Universities have same ethical believes?
- Q3: whether undergraduate students in Public and Private Universities have same ethical believes?
- Q4: whether male and female teachers in Public and Private Universities have same ethical believes?
- Q5: whether male and female students in Public and Private Universities have same ethical believes?

METHODOLOGY

1. Tool of the Study: Study was descriptive; therefore, a self-reported questionnaire was designed to collect data from teachers and undergraduate students during the semesters of 2011–12 from two public and two private sector. The research was greatly inspired by the studies of [7], [24] and [18]. Two parts of the questionnaire were designed to solicit responses. Part – I was designed to collect demographic information which included: university and

gender (see Table 1). Information regarding the prior knowledge and training of IT and IT ethics were also inquired in this section of the questionnaire. While, Part – II was comprised of 16 statements in which respondents were required to respond for the given statement in terms of Right, Wrong and Neither Right Nor Wrong. All statements were presenting some activities/conditions related to the ethical use of computer and internet; which helped to portray their awareness about the ethical use of computer or IT.

2. Data Analysis: The scale was rated from 1 to 3 i.e., 1 = Right, 2 = Wrong and 3 = Neither Right Nor Wrong (NRNW). The collected responses were fed in MS Excel 2007[®] and were analyzed demographically. Statistically, frequencies and percentages were calculated to conclude the results. The Cronbach Alpha test was used to measure the reliability of the items in the tool. Result of the reliability test was 0.73, and hence was acceptable ^[8].

3. Sampling & Respondents: All the four universities were delimited on the bases of convenience based sampling. Regarding the private sector universities, only those were included in the study, which were recognized as degree awarding institution by Higher Education Commission Pakistan. Another delimitation of the study was those undergraduate students who were in semesters 3 and 4 during January – December 2012; which constituted the population of this study. These semesters were delimited because basic computer and internet training courses were compulsory for all students in these two semesters. The questionnaires were distributed among the students within their classrooms and teachers were traced within their offices to ensure the maximum feedback, which resulted for 643 students and 378 teachers. Therefore, 643 students and 378 teachers were considered to be the sample of the study. Maximum percentages regarding sampled teachers showed that overall male teachers, overall public sector teachers, public sector university female teachers and private sector universities male teachers were greater to respond the questionnaire (Table 1). On the other hand, highest percentages of students disclosed that overall female students, overall public sector university students, public sector female students and private sector male students were greater to respond and participate in the study.

Table 1: Demographic Distribution of Overall Sampled Respondents

Categories	Groups	Teachers	Students
		N (%)	N (%)
Gender	Male	198 (52%)	315 (49%)
	Female	180 (48%)	328 (51%)
Universities	Public Sector	222 (59%)	349 (54%)
	Private Sector	156 (41%)	294 (46%)
Public Sector	Male	107(48%)	162 (46%)
	Female	115(52%)	187 (54%)
Private Sector	Male	91(58%)	153 (52%)
	Female	65(42%)	141 (48%)

Moreover, it was found that total 53% teachers admitted that they have no IT training certificate. On the other hand 56% teachers and 58% students disclosed that they have no prior knowledge about IT and computer ethics.

RESULTS

Q1: whether sampled teachers and undergraduate students in Public and Private Sector Universities have same ethical believes?

Form Table 2 it was depicted that overall sampled teachers (99%, n=375) and students (75%, n=481) strongly believe that knowledge about ethical use of computer and IT is important for all. Regarding statement 2, 66% (n=250) teachers believe that downloading music or movies from internet free of cost is NRNW while 41% (n=229) students believe this is not an ethical issue; 76% (n=286) of the teachers and 66% (n=304) of the students expressed that buying a paper online and submitting it as your own is an unethical activity. Major differences among overall sampled

teachers and students were found in statements 6, 10 and 13. In statement 6, 55% (n=207) teachers expressed that it is NRNW to quote every author during lecture while 66% (n=422) students understand that it is wrong to explain a topic without quoting the real author during presentation. Similarly, 90% (n=342) teachers and 52% (n=332) expressed that it is important to quote authors even copying and pasting a single sentence from online resources. Overall 65% (n=413) students said it is true that cheap access of computer and IT tools is one of the reasons for unethical utilization of computer and IT resources students but 72% (n=271) teachers do not believe on this.

Table 2: Responses of Overall Sampled Teachers and Students – Part II of the Questionnaire

Sr. No.	statements	Overall Teachers (n=378)			Overall Students (n=643)		
		Right	Wrong	NRNW	Right	Wrong	NRNW
2.	Downloading music or movies from net is:	34	94	250	261	153	229
3.	Information about ethical use of computer and technology is important:	375	-	3	481	26	136
4.	Buying a paper online and submitting it as your own is:	57	286	35	188	304	151
6.	Explaining a topic during lecture/presentation without quoting the author is:	51	120	207	99	422	122
10.	Copying and pasting one sentence from an online source, in your research work, without acknowledging the source is:	23	342	13	119	332	192
11.	Downloading diagrams or illustrations from web sites with complete reference is:	293	63	22	127	288	228
13.	Economically cheap access of computer and technology makes it easier to perform different wrong activities:	69	271	38	413	93	137

Q2: whether sampled teachers in Public and Private Sector Universities have same ethical believes?

From Table 3 it was found that 52% (n=114) teachers from public universities expressed that it is not an unethical issue to share original software for educational purposes while 71% (n=110) teachers from private universities strictly expressed that this is wrong; 74% (n=164) public sector 55% (n=86) private sector teachers expressed that it is NRNW to download music and movies; 54% (n=119) public sector while 65% (n=102) while private sector teachers were unable to decide whether it is right or wrong to download and use online research tools without quoting the real author; 56% (n=125) public sector and 66% (n=104) private sector teachers believe that it is wrong to including references in bibliography list without quoting them in the main text; and 64% (n=143) teachers public universities believe that sharing and solve research or subject related problems through on line chatting is ethically right while teachers from private sector universities' responses were unable to decide whether it is right or wrong.

Table 3: Responses of Sampled Teachers from Public (n=222) and Private (n=156) Universities

Sr. No.	statements	Teachers from Public Uni.			Teachers from Private Uni.		
		Right	Wrong	NRNW	Right	Wrong	NRNW
1.	Copying original software for education purposes is:	114	34	8	39	110	7
2.	Downloading music or movies from net is:	12	46	164	22	48	86
7.	Downloading and using a research tool for your own research work but ignoring the real author is:	24	79	119	20	34	102
8.	Listing web sites that you do not use to complete a research paper in the bibliography is:	48	125	49	31	104	21
9.	Copying two lines from a printed source, in your research work, without acknowledging the source is:	47	123	52	36	90	30
12.	Using internet chat rooms to ask about your subject is:	112	36	74	60	35	61
14.	Unauthorized sharing of original software with friends is:	143	57	22	94	31	31
16.	Writing a summary based on an online abstract of a journal article rather than reading the article itself:	90	56	76	80	34	42

Q3: whether undergraduate students from Public and Private Sector Universities have same ethical believes?

From Table 4 it was disclosed that 62% each from public (n=218) and private (n=182) sector university students expressed that it is right to copy original software for education purpose; 70% (n=245) public sector and 60% (n=177) students from private universities believe that it is ethically wrong to explain a topic without quoting the real authors; 60% (n=211) students of public sector understands that it is ethically wrong to use an online research tool without getting permission is ethically wrong but students from private universities were unable to decide whether it is right or wrong; students from both sides were not clear about statements 11, 12, 14 and 16. These results reflect that they have poor knowledge about ethical utilization of computer and IT resources.

Table 4: Responses of Sampled Students from Public (n=349) and Private (n=294) Universities

Sr. No.	statements	Students from Public Uni.			Students from Private Uni.		
		Right	Wrong	NRNW	Right	Wrong	NRNW
1.	Copying original software for education purposes is:	218	58	73	182	54	58
6.	Explaining a topic during lecture/presentation without quoting the author is:	46	245	58	53	177	64
7.	Downloading and using a research tool for your own research work but ignoring copy right acts is:	48	211	90	72	143	79
11.	Downloading diagrams or illustrations from web sites with complete reference is:	73	164	112	54	124	116
12.	Using internet chat rooms to ask about your subject is:	87	161	101	112	83	99
14.	Unauthorized sharing of original software with friends is:	194	83	72	135	71	88
16.	Writing a summary based on an online abstract of a journal article rather than reading the article itself:	125	73	118	122	51	85

Q4: whether male and female teachers in Public and Private Sector Universities have same ethical believes?

From Table 5 it was explored that 100% teachers from both public (n=107) and private (n=115) universities understands the importance of information regarding ethical use of technological resources in education; 67% (n=72) male and 80% (n=92) female teachers of public universities marked on NRNW in the response of the activity to download music or movies available online; 70% (n=74) male and 76% (n=87) female believe it is ethically wrong to copy and paste any online essay/research paper or any topic related to their subject and present as it their own; responses of statements 9, 12 and 16 from both male and female teachers responses were not supportive to decide about their awareness; but 91% (n=105) female teachers expressed that sharing original software with friends is ethically right.

Table 5: Responses of Male (n=107) and Female (n=115) Teachers from Public Universities

Sr. No.	statements	Male Teachers			Female Teachers		
		Right	Wrong	NRNW	Right	Wrong	NRNW
2.	Downloading music or movies from net is:	4	31	72	8	15	92
3.	Information about ethical use of computer and technology is important:	107	-	-	115	-	-
5.	Copying and pasting an essay from the Internet and submitting it as your own is:	24	74	9	17	87	11
9.	Copying two lines from a printed source, in your research work, without acknowledging the source is:	26	58	23	21	65	29
12.	Using internet chat rooms to ask about your subject is:	52	18	37	60	18	37
14.	Unauthorized sharing of original software with friends is:	38	57	12	105	-	10
16.	Writing a summary based on an online abstract of a journal article rather than reading the article itself:	46	27	34	44	29	42

Results of Table 6 showed that 73% each male (n=66) and female (n=48) teachers' from private universities believe that copying original software for educational purpose is ethically right; 58% (n=53) male and 51% (n=33) female teachers responded that it is NRNW to download music or movies file from net; and 100% (n=91) male and 65% (n=56) female teachers expressed that copying and pasting a single line from a web page is NRNW activity.

Table 6: Responses of Male (n=91) and Female (n=65) Teachers from Private Universities

Sr. No.	statements	Male Teachers			Female Teachers		
		Right	Wrong	NRNW	Right	Wrong	NRNW
1.	Copying original software for education purposes is:	66	17	8	48	17	-
2.	Downloading music or movies from net is:	8	30	53	14	18	33
4.	Buying a paper online and submitting it as your own is:	21	62	8	9	50	6
7.	Downloading and using a research tool for your own research work but ignoring copy right acts is:	17	13	61	3	21	41
10.	Copying and pasting one sentence from an online source, in your research work, without acknowledging the source is:	-	-	91	7	2	56
13.	Economically cheap access of computer and technology makes it easier to perform different wrong activities:	29	51	11	2	53	10

Q5: whether male and female students in Public and Private Sector Universities have same ethical believes?

Table 7 portrayed that 59% (n=95) male and 66% (n=123) female students from public sector universities believed that copying original software for educational purposes is ethically right activity; regarding statement 2 their responses were apparently scattered and were not supportive to make any decision regarding their awareness but majority of them were marked the option NRNW; 54% (n=96) male and 56% (n=116) female students believe that it is ethically wrong to include the references of websites that were not used to complete a research work or assignment; 59% (n=73) male and 60% (n=102) female expressed that copying text from printed sources without acknowledging the real author is ethically wrong; 50% (n=8) male students and 61% (n=114) female students from public universities disclosed that unauthorized sharing of original software among the friend is ethically right to them.

Table 7: Responses of Male (n=162) and Female (n=187) Students from Public Universities

Sr. No.	statements	Male Students			Female Students		
		Right	Wrong	NRNW	Right	Wrong	NRNW
1.	Copying original software for education purposes is:	95	21	46	123	37	27
2.	Downloading music or movies from net is:	54	47	61	83	55	49
8.	Listing web sites that you do not use to complete a research paper in the bibliography is:	35	87	40	60	105	22
9.	Copying two lines from a printed source, in your research work, without acknowledging the source is:	20	96	46	34	116	37
10.	Copying and pasting one sentence from an online source, in your research work, without acknowledging the source is:	31	73	58	37	102	48
14.	Unauthorized sharing of original software with friends is:	80	37	45	114	46	27
16.	Writing a summary based on an online abstract of a journal article rather than reading the article itself:	55	32	54	70	41	64

Table 8 showed that 68% (n=103) male and 56% (n=79) female students from private sector universities were believe in copying original software for educational purposes is ethically right activity; regarding statements 4 and 5 their responses were apparently scattered and were not supportive to make any decision regarding their awareness but majority of them were marked the option Wrong; 51% (n=78) male students believe that it is ethically wrong to listing irrelevant website references in the assignments or research works while female were indecisive again; 59% (n=89) male and 55% (n=78) female students expressed that copying text from printed sources without acknowledging the real author is ethically wrong; each male and female students' responses from private universities were scattered among the ranges, and hence therefore unable to decide about their awareness about statement 15.

Table 8: Responses of Male (n=153) and Female (n=141) Students from Private Universities

Sr. No.	statements	Male Students			Female Students		
		Right	Wrong	NRNW	Right	Wrong	NRNW
1.	Copying original software for education purposes is:	103	23	27	79	31	31
4.	Buying a paper online and submitting it as your own is:	57	61	35	40	61	40
5.	Copying and pasting an essay from the Internet and submitting it as your own is:	59	61	33	37	63	41
8.	Listing web sites that you do not use to complete a research paper in the bibliography is:	43	78	32	37	63	41
9.	Copying two lines from a printed source, in your research work, without acknowledging the source is:	30	89	34	27	78	36
14.	Unauthorized sharing of original software with friends is:	72	35	46	63	36	42
15.	Unauthorized sharing of music and movies files with friends is:	53	57	43	26	66	49

CONCLUSION

Due to the increased use of computer and IT based resources in teaching and learning process, it is important to strengthen the awareness of ethical use of these resources among the same^[5]. Otherwise, these may produce negative impact not only in educational institutions but overall on society as well^{[9][19]}. Due to the inclusion of these technological based resources at all levels of education, it was deemed important to explore the awareness about the ethical use of these resources in teaching and learning practices of university teachers and students. Therefore, a sample from undergraduate students and university teachers from 2 private and 2 public universities; located in a specific area; were selected for this purpose. Therefore, the results of this study may be generalize-able to the specific region and surrounded universities teachers and students, only.

Results found from the survey were not very highly appreciated because overall sampled teachers and students were not properly educated about computer and IT ethics. Regarding the information about computer and IT training and prior knowledge about computer^[6] and IT ethics it was found that majority of the teachers were using IT resources professionally because of their personal interest and have not been properly trained from any institution, while majority of both sampled teachers and students disclosed that they have not been provided proper knowledge or information (i.e., included in their course outline or generally discussed in their classes between or among teachers and students) regarding the use of computer and IT ethics during their previous educational durations.

From the calculated frequencies and percentages it was concluded that there were no significant differences found between the responses of overall sampled teachers and students regarding the ethical use of computer and IT resources except on two situations: one is in which, teachers believe that it is good to quote every author during lecture or presentations but not necessarily important and cheap access of Computer and IT resources is not the only reason of unethical utilization of these resources, while students do not.

Regarding the awareness about the ethical use of computer and IT resources of sampled teachers from public and private universities; it was found that teachers from private sector universities were more clearer in their believes than to the public sector university teachers. On the other hand, no significant differences found between the

responses of sampled students either from public or private sector universities.

No significant differences found from the responses of male and female teaches either from public sector and private sector universities regarding the ethical utilization of computer and IT resources. Similarly, no drastic differences found from the responses of male and female students either from public and private universities^[27]. This helped to conclude that their ethical believes regarding the utilizations of computer and IT resources were same.

Regarding the activities (i.e., reflecting the ethical or unethical utilization of computer and IT resources) given in sixteen different statements in Part – II of the questionnaire, it was concluded that sampled teachers believed that: knowledge about ethical use of computer and IT, downloading diagrams or illustrations with complete references, unauthorized sharing of original software among friends and summarizing an article with the help of abstracts only for citation is ethically RIGHT. Copying original software for educational purposes, buying and submitting an online paper with their name, listing irrelevant websites in the reference list, downloading on online research tool for your own research work by ignoring the copy right acts and copying text either from online text or from printed content are ethically WRONG activities. Downloading music or movies from NET and explain a topic during lecture or demonstration without quoting each author are ethically Neither Right Nor Wrong (NRNW).

In case of students: majority of the sampled students copying original software for educational purposes, downloading music or movies, information regarding ethical use of IT, economically cheap access of IT based resources are the reasons of immorality, and unauthorized sharing of original software among friends^[24] is ethically RIGHT. Buying a paper online and submitting it as their own, copying and pasting text either from online resources or printed resources, explain a topic without quoting the real authors is ethically WRONG. And downloading on online research tool for your own research work by ignoring the copy right acts, listing irrelevant websites in references list and sharing of unauthorized sharing music and movies is ethically Neither Right Nor Wrong (NRNW) activities.

After conducting this study, it was strongly recommended to include Computer and IT ethics in all the course outlines in which computer and other IT resources are directly involved for providing proper knowledge^[18]. Moreover, conduct seminars, debates, discussions and conferences at all levels of education for not only highlighting the importance of computer and IT ethics but also broaden the awareness about the same. Sample size and targeted population of this research was limited. Therefore, it is also recommended to include more universities from different regions and provinces of the country to explore teachers and students understanding regarding the ethical use of computer and IT.

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Teaching Undergraduates how to Analyze

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ABSTRACT

Analysis is typically listed in taxonomies of higher order thinking. Academics consider these taxonomies worthwhile, but they are hard to teach and we are apt to ignore them. Today higher education is criticized for “dumbing down” curriculum or lowering standards. To rectify this, many policies at the state or national level are requiring higher education institutions to change. In K-12 education, Race to the Top and Common Core requirements are placing new demands on K-12 teacher preparation, which include evaluation of the analysis skills of pre-service teachers. But professors do not always view their disciplines as the proper place for teaching analytical skills. Others become frustrated when trying to teach analysis. But if we do not teach these skills, our teacher candidates will be poorly prepared for success, a problem which will cascade throughout our society, rendering our citizens less educated. In this paper, we describe our efforts to teach analysis in two courses from widely differing subject areas, literacy and mathematics education. We are now requiring teacher candidates to analyze simulated or actual samples of student work. We have developed a sequenced process of analysis education that we believe can be generalized to many other courses.

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INTRODUCTION

The ability to analyze is a vital aspect of the academic endeavor. Students at all levels struggle with analysis, but because analysis is difficult to teach, instructors and professors sometimes lower the bar on what is expected, viewing the teaching of analytical thinking as outside their scope of responsibility, or perhaps beyond any teacher's reach. In this paper, we discuss how we foster analytic thinking in a mathematics course and in reading education. Across the nation, educational reform is being required at all levels. The Common Core Standards for language arts and mathematics education stress the acquisition of analytic thinking (National Governors Association, 2010). Sometimes the changes are enthusiastically embraced; always they must be addressed and incorporated into new curricula. In Tennessee, a reform of teacher education has mandated a series of new requirements for teachers. The initiative is a result of several policies, notably Race to the Top, a product of competition between state departments for Federal funds requiring alignment with a Federal agenda. Race to the Top is concerned with K-12 education, but it is having a profound impact on higher education coming in the form of the Ready2Teach initiative, which is directly changing the education of prospective teachers at all six Tennessee Board of Regent's (TBR) universities (TBR, 2010). TBR is the nation's sixth largest university system; thus the impact of the Ready2Teach initiative is immense.

Ready2Teach requires that teacher education programs be redesigned and individual courses be rewritten in line with its policies. Prospective teachers must now be taught about student learning using Stanford's SCOPE framework (see Figure 1). In this paper, we use the term 'student' to designate pupils in grades K-12, while the pre-service teachers with whom we work are called teacher candidates. We describe how we have adjusted our courses to support several subcategories in the SCOPE framework, specifically, *Assessments to Monitor Student Learning*, and *Analysis of Student Learning*. We officially began to pilot these adjustments to our courses in 2012, and as we analyzed our own goals in teaching, we have identified some learning characteristics of our teacher candidates which, we believe, transcend our classes and program. While able to build rapport with K-12 students, our candidates are typically weak in analysis of educational problems when they arrive in our classes. We illustrate how we foster analysis in two very different courses. We believe the same process might be applied to any teacher education program or other course in higher education where analysis is valued. We support our ideas with anecdotal data and conclude with our ideas on why the skill of analysis is initially so weak.

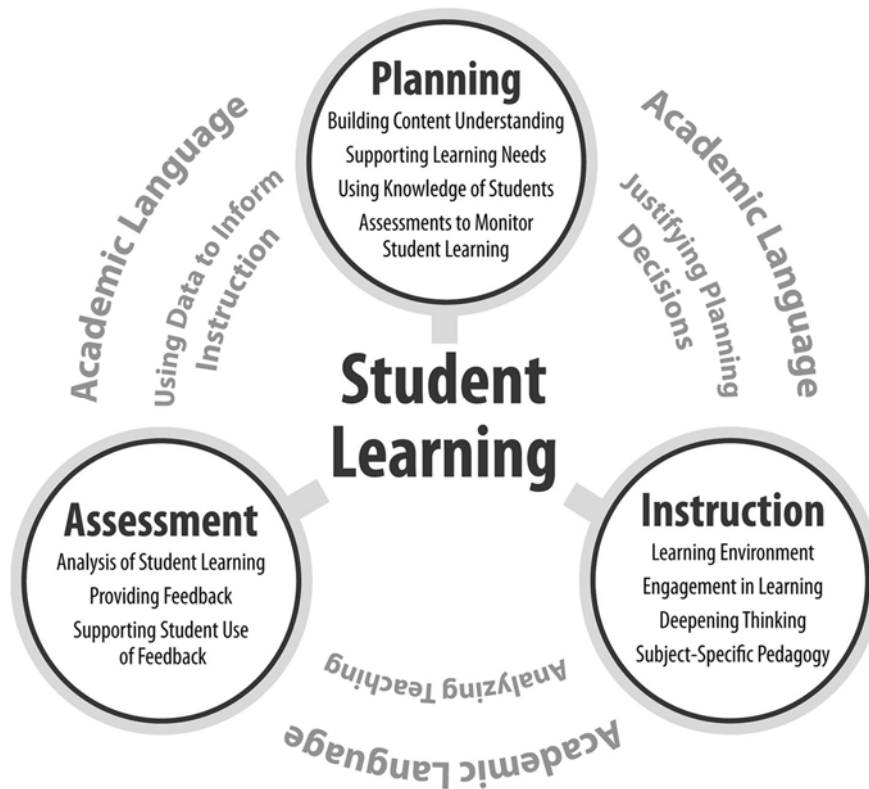


Figure 1. Stanford framework from the SCOPE project

IMPLEMENTATION IN HIGHER EDUCATION, MATH METHODS EXAMPLE

The skill of analysis is required in many areas of our Interdisciplinary Studies in Education program, which prepares students to teach in grades K-6. One focus of our teaching is strategic analysis of student work.

Using a problem-based learning approach (Duch, Groh, & Allen, 2001; Levin, 2001), pre-service teachers hear a brief story about a struggling third grade student and are then presented with a sample of this student's work. Teacher candidates are given a week to study this case material. Following this, there is group analysis and discussion. Teacher candidates must prepare a 2-3 page analysis of student work, with this suggested structure: 1) Identification of misconception or errors, 2) Supporting evidence and 3) connection to other aspects of student work or relevant peer-reviewed literature.

At first, teacher candidates struggle with identification of student misconceptions. Typically, they react to incorrectly executed addition or subtraction by stating, "This student forgets to borrow or carry her ones." To scaffold the teacher candidates in their presentation of analysis, we instruct them to go beyond description. We require analysis. Most teacher candidates have not been required to conceptualize at this level, especially in the context of mathematics. They must move beyond description and produce such analyses as, "This student lacks knowledge of place value. When she adds $9 + 6$, she gets 15, but then writes both digits of the 15 in the tens column, even though there are still hundreds digits to add following this computation." The difference between these two statements is that the first identifies a procedural error, while the second identifies the mathematical knowledge, or lack thereof, causing the error.

Teacher candidates are required to provide examples from the student work in support of their analyses. They might say, "Her misconception of place value is evident in problem #2, when she attempts to add $197 + 66$." Frequently, our teacher candidates can describe an error, but are unclear where they have seen it. Their writing sometimes lacks context, for our candidates sometimes assume the only audience for their writing is the professor who provided student samples and is fully familiar with them. Our goal, by contrast, is teaching them to write about math performance for other educators.

The requirement that they make connections to other aspects of the assignment or professional literature is the most difficult for the teacher candidates. Rarely have they read literature on analyzing student work, and finding links to other courses and internship experiences is difficult. In this assignment teacher candidates are expected to cite relevant literature; in the earlier example they might say something like, "Ashlock (2010) describes many errors in student computation and in particular illustrates student work that displays errors in place value that result in

unreasonable computations.” As they learn to analyze obstacles to learning, teacher candidates also make connections to peer-reviewed literature documenting difficulties encountered by English Language Learners (ELLs) and students with special needs. The aim is helping the teacher candidate realize that analysis of student work is not a simple matter of saying what students “get right” and “get wrong” nor even of describing the error; rather, we seek a paradigm shift where errors are viewed as a means of assessing what a student is confused about and needs to learn next.

IMPLEMENTATION IN HIGHER EDUCATION, READING COURSE EXAMPLE

This way of looking at errors in math is similar to the miscue analysis we employ in literacy education (Johns, 2012). Assessment and Enhancement of Reading is an upper level course whose goal is making teacher candidates aware of reading as a developmental process. Our teacher candidates educational experience has taught them a discourse (Gee, 1999) where student output is graded, production is viewed as either right or wrong, and the role of the teacher is praising students, or else reprimanding them for not trying. We call this the discourse of scoring. It has limited utility in math education; nor is it particularly useful in teaching children to read. Our course seeks to move teacher candidates into a developmental discourse which examines what children already know about reading, analyzes what might be getting in their way, and suggests strategies for further mastery (Johns, 2012).

In one assignment, we require teacher candidates to administer the Johns Basic Reading Inventory to an elementary school child who reads at approximately grade level and to use the information thus gained to develop a developmentally appropriate reading activity. The assessment yields rich data on a young reader’s errors, which in developmental discourse, we term “miscues” (Goodman, 1996). The assessment itself consists of graded word lists, reading passages and comprehension questions. It is easily administered, and when analyzed properly, it offers a window into the child’s reading process, where it is possible to learn what a boy or girl does when encountering unfamiliar text (Aarnoutse, et al., 1999). By examining the word lists, we discover if they use or confuse graphically similar words such as ‘ball’ and ‘doll’; whether they reverse letters and read ‘saw’ for ‘was’; whether they decode the first part of the word and guess at the rest so that ‘horse’ is rendered ‘house,’ ‘library’ as ‘liberty,’ ‘industry’ as ‘instruct,’ and ‘invention’ is read as ‘invitation.’ The reading passages yield even richer data. We learn, first of all, if children expect what they read to make sense. If they do not, sentences such as “The puppy was a black poodle” might be rendered, “The puppy was a big puddle” and not self-corrected. On the Johns Inventory, miscues are coded as reversals, omissions, substitutions, insertions and non-words. Self-corrections using context and substitutions of contextually acceptable words are not deemed significant. The inventory sorts errors in comprehension, coding them as factual, thematic, inferential, and vocabulary based (Johns, 2012).

While teacher candidates have little difficulty administering the inventory, they find its analysis challenging. They resort to the discourse of scoring which they have learned since grade school. For example, when a child’s decoding strategies break down on encountering unfamiliar words, a teacher candidate might write, “She did a great job on the fourth grade list and got all the words right, but when she got to the fifth grade list, she got sloppy and got 12 of them wrong.” When a child renders a sentence, “The sun looks much larger than the stars you can see in the night sky” as “The sun looks bigger than stars you see up in the sky,” we do not view it as a significant problem (Johns, 2012). Concerned about accuracy, our teacher candidates are apt to comment that the child needs to “slow down more so she’ll get the words right.”

To promote the discourse shift we are looking for, students are asked to organize their data as shown in Table 1.

Table 1. Samples of text and student miscues.

Text says	Student’s Miscue
Puncture	Picture
Ornamental	Oatmeal
Complex	Complete
Contraction	Contraption
Distort	Distant

In the above example, we want teacher candidates to notice that the student decodes the initial letter accurately in all cases and apparently guesses the rest. While the words substituted bear no semantic similarity to the

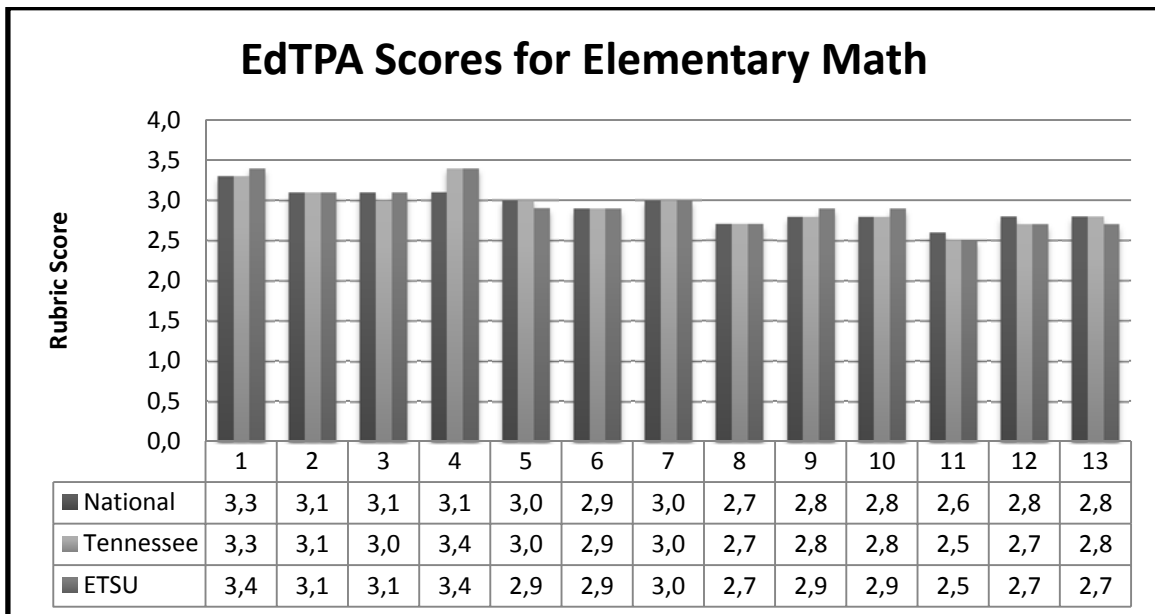
text, they are usually of similar length and shape. The words “distant” and “distort,” for example, are graphically similar. We want teacher candidates to realize that a student making such substitutions is overusing graphic and phonetic cues and makes inadequate use of context. The student may be unaware that text is supposed to make sense. In such instances, the teacher candidate must make the child aware of this as use of context is taught.

Typically, teacher candidates have trouble recognizing whether students utilize context as they read. They may have trouble discriminating between types of errors, though they are quick to correct them. Candidates have difficulty identifying the pattern of student errors and often tell us no pattern exists. For this reason, we require them to bring miscue data to class, where we examine it together. Initially, they are apt to frame data using the discourse of scoring, with which they have grown up (Gee, 1999). But as they recognize the utility of developmental discourse for planning instruction, our teacher candidates start using it in their assignments. A few resist. This, ironically, is where the instructor shifts to the discourse of scoring, and candidates are reminded of the requirements. Allowances are made for the unfamiliarity of the target discourse, and if on later assignments, our candidates show they have mastered developmental reading discourse, we adjust their grades accordingly. For while the scoring is useful in evaluating terminal achievement, we and our students are better served by a discourse of analysis and development when we teach.

EVIDENCE OF EFFECTIVENESS

To teach in an age of accountability means we must supply evidence that our methods are proving effective. Administrators and other evaluators will require empirical proof that instructional strategies work. Until recently, there were no systems in place within our department to monitor the effectiveness of teacher candidate analytical skills external to our own grading. With a new assessment in place for our graduating seniors, we now have a category that evaluates our teacher candidates’ skill in analysis. The edTPA is now required for all our teacher candidates who seek to graduate and receive a license to teach in grades K-6. In the 13 categories scored in this assessment, #10 specifically addresses analysis of student work. Table 2 shows our scores in item #10 exceed state and national averages. Our program scores higher than the national average in four categories. While this evidence is not conclusive, it suggests an elevated level of development in the area of analysis.

Table 2. Scores for the edTPA



Elementary Math edTPA legend: Planning 1-4; Instructing 5-6; Assessing 7- 9; Analyzing-10; Academic Language-11-13

GENERALIZING THE PROCESS TO ANY COURSE

In examining our instructional practices, we identified four components essential to teaching candidates how to analyze. We have developed the acronym CODE to describe the process in which we engage.

1. **Compile data.** Analysis, to be legitimate, is data driven. We instruct teacher candidates in discipline specific techniques of acquiring information to analyze. In early assignments, the instructor may provide this data as scaffolding.
2. **Organize.** An analysis should result in the recognition of patterns. One is likely to see these only when data are organized. Candidates are therefore shown how to form lists and tables of the student data they inquire.
3. **Determine.** We model inspection of organized data, showing our teacher candidates how we identify patterns. These are sometimes readily apparent, but more often pattern recognition is a recursive process, where we continually check our hunches as we continually examine data.
4. **Explain.** We ask our teacher candidates to explain the patterns they identify and pinpoint the reasons for what they see. We require them to connect these explanations to discipline specific concepts.

We believe that this method transcends teacher education and is widely applicable to situations where college students learn to analyze data.

CONCLUSION

Analysis is essential in any field, and we expect our teacher candidates to utilize it. However, college students often struggle with analysis. Some instructors and professors are tempted to reduce expectations, viewing the teaching of analytical thinking as someone else's job. Others behave as if it is impossible to teach. In this paper, we have provided examples of how analytical thinking and the associated written description of this process can be conducted.

We have discussed analysis in a mathematics course and a course in reading education and introduced a sequenced process for teaching analysis, one we call CODE. We believe analysis is both context specific and teachable. Our teacher candidates must learn the analytic skills relevant to the subjects they will teach so they can transmit this ability to their students. Standards and expectations in higher education coursework must not be lowered, but rather, instructors and professors need to analyze courses and determine what scaffolding is necessary so that students can be taught to think analytically and report their analysis using appropriate terminology.

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Project Based Learning to Promote Educational Leadership Skills Implementation in an Environmental Science Course at Zayed University

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ABSTRACT

The main idea underlying this work is that higher education students can develop educational leadership skills throughout the learning process supported by the approach of project based learning (PBL). This method has been known to point out at the challenge of increasing students' motivation, their involvement in the course, and looking for applications of their learning. This study shows the benefits of designing a project in an environmental science course to create a more effective learning medium. Using PBL, students who were enrolled in the introduction to the environment sciences' course at the general education level at Zayed University, were given the responsibility of quantifying the consumption of paper, to study qualitatively and quantitatively how this consumption would affect ecological resources as well as air pollution production. Students needed afterwards to discuss the benefit of recycling and how this can affect people lives. With the use of the PBL approach, students have shown a good improvement within the area of educational leadership skills (objective, group work, motivation). Most important of all, students showed a high level performance and course satisfaction.

Keywords: Educational leadership skills, Project based learning approach, Project design, General education courses, Introduction of environmental sciences' course.

INTRODUCTION

Over the last three decades, research has suggested that opportunities for gaining a good understanding of science could be achieved via courses that use project based learning approach (Egenrieder, 2010). In fact, PBL is a comprehensive method in which students work in groups and conduct an investigation of a real world topic. Students need to work over extended period of times to solve challenging questions or problems. Therefore students would be involved in the process by: designing and conducting investigations, gathering information, collecting data, asking questions, drawing conclusions based on their results and reporting their findings toward the end of their work (Peggy, 2009).

Today's students need a better understanding of what science is, a clear presentation of scientific concepts, activities that require analysis and interpretation of real data, and most of all a deep appreciation for the role of sciences to the well-being of humanity (Cox, 2012). Indeed, project based learning is believed by its nature, to provide the opportunity to students to accomplish all of that. Rivet and Krajcik (2004) reported that the design of project based curriculum that converges the learning of sciences from concepts based to meaningful world projects, promoted learning of important and practical science content (Rivet, 2004). In another study, project based learning environment and its impact on students have been investigated. The results indicated that PBL has been motivational and effective when it comes to development skills, students have gradually shown more interest and more confidence about different component of their project (Papastergiou, 2005). A similar study conducted for first year undergraduate students, aimed to investigate the effect of PBL on science students' achievement and their development of scientific process skills. The research findings proved that there was a significant improvement of students' learning as well as an enhancement of their attitude toward sciences and research skills (Altun, 2009).

In the education field, professors and students often speak of skills and knowledge as separate matters, while, indeed, there are intertwined. For instance, if a student has developed the ability to "think scientifically," he or she can do so within a context. In this regard, domain knowledge is mainly important as a channel to teach how to think scientifically. Furthermore, project based learning as well as problem based learning have been proved to be good approaches in implementing business skills (Stinson & Milter, 1996) and technical skills (Littlejohn, 2002). As per

leadership skills (Goal setting, group work, motivation,...), there is little evidence of research on the actual effectiveness of the academic programs offered at the higher education level to develop leadership skills. Students' successes or failures were due more to context, previous experience, and personal characteristics than to any appropriate effort to provide them with these skills within the educational context. University's students have been expected to have the necessary skills on entry into the job market, or to develop them on the job via professional development and/or special trainings. Thus the aim of this work is to attract the attention to the importance of using academic approaches as vehicles of implementing leadership skills within students' population at the higher education level.

The main goal of this study was to investigate the important effect of PBL in promoting the implementation of educational leadership skills (Objective, group work, motivation) within undergraduate students' population at Zayed University, as well as their academic performance. The performance and the acquiring of educational leadership skills have been compared with that of students in the standard curriculum over two semesters. More specifically, a lot of effort was given to the design of the project and how students could use it to discuss and find a solution for a real world problem. Three methods were used to evaluate the output of the study: Grade's comparison, class observation and students' survey. And the reseach results revealed that science achievement of undergraduate students significantly improved with the acquiring of educational leadership skills via project based learning.

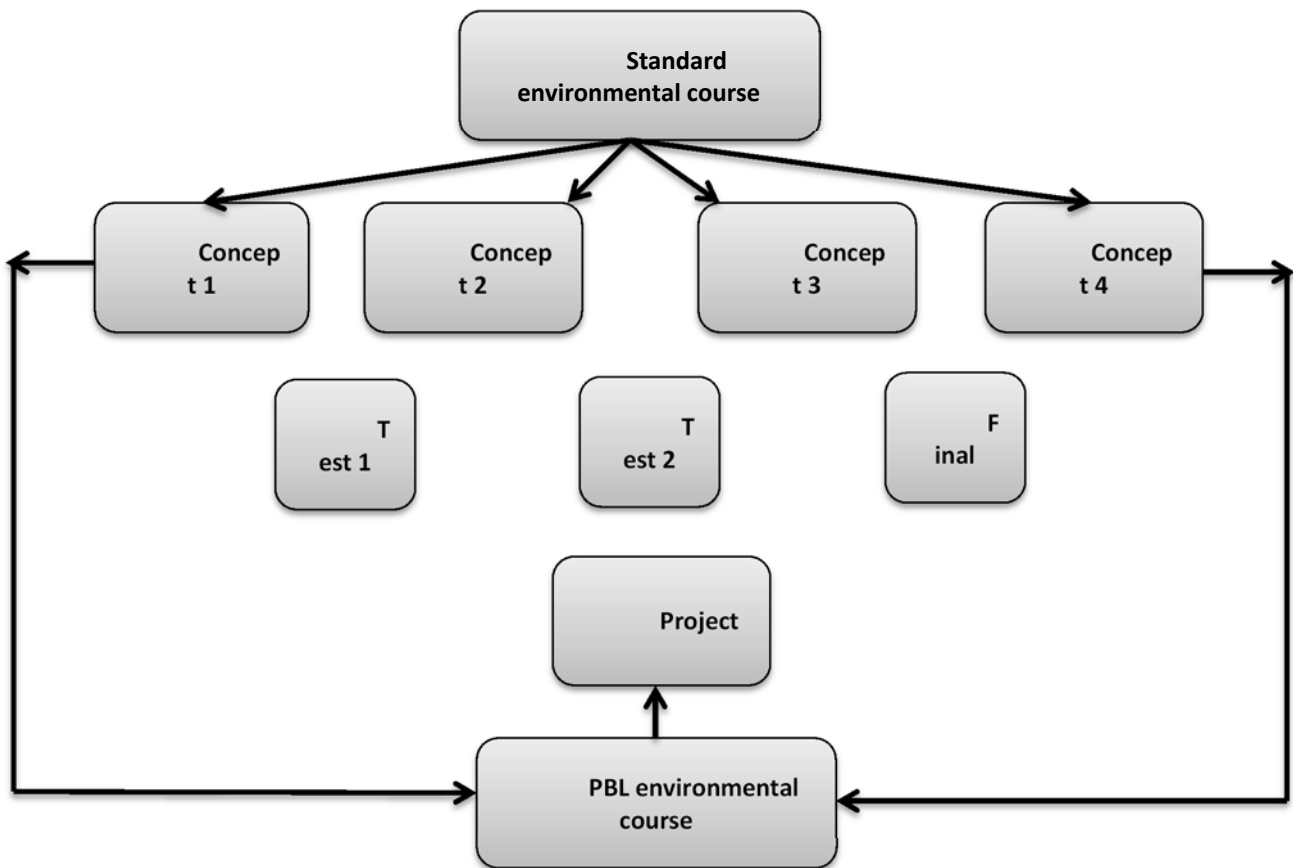


Figure1: Course map for the introduction to the environmental sciences course using the PBL approach.

METHODS

The sample of the study conducted at Zayed University, Dubai campus, UAE, consisted of a total 111 students from the general education level. The project based learning approach was developed for a non-science majors introductory environmental science course taken by all undergraduate students to fulfill the science general education requirement. The course was normally scheduled to meet three times a week for a period of 50 minutes each time. Course sections had in average 20 students. And, over three consecutive semesters (Fall, Spring and Summer) of the academic year 2012-2013, data were collected.

Typical introductory to the environmental sciences course often is presented as a sequence of topics-based lectures and various assignments. These assignments are most of the time directed by a series of questions and instructions to introduce students to general environmental knowledge. Although, undergraduate students may enjoy learning about environmental problems and discussing possible solutions, it has been noticed that most of the time,

they fall short in understanding the relationship between the knowledge they have learned and its application to their real lives.

The basic idea behind this work is to incorporate the approach of project based learning within the traditional course. The course was redesigned to provide students with a project at the beginning of the semester. Students of the introduction to the environmental sciences' course were offered a good opportunity to work on a meaningful project in class through project based learning and under the course same outlines.

Procedure: In a typical introductory course to environmental sciences conducted at Zayed University, students usually are presented with the contents of four units that discussed different environmental aspects. And each unit is followed by a test. Students' focus is directed toward getting the unit done quickly and the whole main objective of the course could easily be lost. In the redesigned form of the course, and to truly understand the course content and successfully engage in the project based learning method, students need to understand that if the first step of their project is not performed properly, they will fall the following steps. Achieving success in each part of the project provided students with self-confidence and brought motivation and enthusiasm for the course.

Figure 1 illustrates the course map and how different components of the course are related. Students earn the necessary course knowledge throughout class discussion and activities in addition to a project that is embedded along the semester.

Different units of the course included the social aspect which covered population and how it affects the environment. This was followed by discussing the ecological aspect by learning different component of an ecosystem and how does losing one component may affect the whole system leading to dangerous environmental problems. The third unit of the course focused on learning about biodiversity and therefore understanding why each ecological unit of an ecosystem is valuable from an instrumental and from an intrinsic point of view. In the last unit of the course, students needed to learn about air pollution and how this may affect biodiversity. While the classroom discussions include the basic knowledge of the course followed by a unit test, there were designed with the goal of completing the course project that all of the students were involved in during the whole semester.

During the first week of the semester, students were introduced to the PBL approach, its goals and procedures. At the start of each class meeting the basic unit concepts were discussed and once a week, students were provided with time to work on their project in class, to discuss problems and challenges they were confronted with.

Project based design of PBL: The students of the introduction to the environmental sciences' course needed to work on a project that reflects the UAE ecological foot print. Early in the semester various discussions were held concerning this issue and the decision came up to work on paper consumption. The project was then divided on different sections related to different units of the course. At the first phase of the project, students with their groups needed to quantify their paper consumption (A4 paper) during a period of two weeks. After that, the social aspect of the course was taken into account by using population numbers. The following phase concentrated on quantifying how much trees are used to make paper that was consumed in the first phase, as well as discussing the impact of losing trees on the ecosystem and the biodiversity therein. In the last phase of the project, students and their groups needed to quantify chemical pollutants produced (carbon emission) as per their individual paper consumption. Overall, students of the introduction to the environmental sciences' course needed to present, in a report, their data collections, calculations, predictions, analysis and problem's solution.

Study evaluation: At the end of the semester, an online survey was given to the students of the introduction to the environmental sciences' course which contain ten questions. However, in this paper, only few questions are discussed and analyzed. Also, student's academic performances were measured based on their tests' grades, and overall course grades. Different semesters' results are presented in this paper for the reason of comparison. Furthermore, and to better assess student attitude toward the course and the PBL approach, an evaluation based on observation was conducted in a weekly basis. The observation was launched at the beginning of the semester and number of students who were involved in their work, were asking questions and paying attention during course discussions or project work, was recorded.

RESULTS AND DISCUSSION

In this work, the main objective behind using project based learning in a science subject, is that designing projects that are relevant and interesting are known to give students good opportunities to become independent learners and be more involved with the course material. All of that can be achieved by acquiring educational leadership skills as well as scientific skills. (Bolotin & Svinicki, 2000) The students' population involved in this study is non-science majors, that implies that students had various levels at sciences and quantitative background. Therefore, teaching this heterogeneous group of students is known to be a very challenging task. However, if the PBL approach is used, every one of these students will be given a chance to contribute, and to develop the project work and therefore

have a very valuable impact on students acquiring many educational and scientific skills. Students are developing the skill of working with a clear objective (Knowledge in action) as well as developing the skill of working within groups.

Furthermore, it has been proven that the success of using the approach of PBL (and therefore educational leadership skills implementation) within the instructing process in higher education is based on its special characteristics, and that is that of the practice nature of knowledge and learning, on the nature of the project, and finally on the knowledge integration. All of that has proved to overcome challenges of the learning process in higher education. (Scarborough, et al., 2004)

The main goal of this study is to focus on the project design and help students put their knowledge gained in the introduction to the environmental science course into action. For example, in this project-based learning course, instead of just learning and discussing about the social aspect of the course, the ecology and biodiversity aspect, and the chemistry and physics aspects, students take on the role of discussing and quantifying an environmental problem that concerns them and their country and that is that of the very high ecological footprint. Classroom discussions had come up with the decision on working on paper consumption as being one of the most contributors to the ecological footprint in the UAE. In these roles, students think about how different concepts they have studied could apply to the cases they are working on. Using projects as the spine of the course, in which students take on authentic roles and participate in simulations of real-world scenarios, allows students to engage with the content in context as well as to apply what they learn throughout the semester, not just on one test. In the first part of the project, students needed to collect their paper consumption data (A4 paper) for a period of two weeks. That will give students a good idea about how much they can consume paper for longer period of time such as a month and a year. After that, students needed to come up with predictions of yearly paper consumption from within their own families, cities and then the UAE. The table below shows an example of the sample data collected and processed by one of students' groups that took the introduction to the environmental science course during summer 2013 at Zayed University in Dubai.

Quantification of A4 paper consumption					
	Week/ Number	Month/ Number	Year/ Number	Yearly consumption/grams	Yearly consumption/Tones
Individual students	41	164	1,968	10,017	0.010017
Student's family	287	1,148	13,776	70,119	0.070119
Student's city population	82,129,970	328,519,880	3,942,238,560	20,065,994,270	20,065.99
UAE population	338,826,870	1,355,307,480	16,263,689,760	82,782,180,880	82,782.18
UAE active population	279,532,137	1,118,128,548	13,417,542,576	68,295,291,712	68,295.29

Table1: A summary of an average A4 paper consumption of a students' group that was part of the PBL project. (Summer 2013)

The above data was collected by each group of students. Students have worked out their average daily A4 paper consumption and their weekly consumption. The monthly and the yearly consumption were predictive calculations based on the actual average daily consumption. After that students needed to move further and try to quantify how much A4 paper their families consume in a daily, a weekly, a monthly and a yearly basis. The family data was predictive calculation based on the actual average individual student's consumption (Seven family members were used to predict how much the above family consumes of A4 paper). These calculations were followed by a trial to estimate how much A4 paper a city can consume. Dubai was the city used in the above example, and a recent

population number of Dubai was used (2,003,170). (Total Population of the UAE, 2013). Then, a trial to estimate how much A4 paper the UAE population can consume in a daily, weekly, monthly and yearly basis. The estimation was based on the individual student consumption and using a recent UAE population number (8,264,070). (Total Population of the UAE, 2013) This last estimation on how much A4 paper the UAE population can consume is not quite accurate, as the calculation assumes that all population is consuming A4 paper in a similar way. Therefore, the use of a better estimation of population that are effectively using paper and that is what is called "Active population". This latter is known to be a group of population that includes ages from 15- 64 years old. Using a recent estimate, it has been reported that only 6,817,857 (82.5% of the 2010 UAE population) is categorized under the active population group. (The Demographic Profile of the United Arab Emirates, 2013)

To better quantify the number of A4 paper consumption in the UAE, students needed to conduct a unit conversion (from numbers to grams). An international conversion rate was used and the students' yearly consumption data was converted from number of paper to the weight in grams and tonnes. The conversion rate used in this phase of the project is that 1 A4 paper weights around 5 grams. (Paper density, 2013) In addition to the litterature rate conversion, students have used an electronic balance inside the classroom, and the rate found was around 5.09 g.

The data that students have collected, calculated, projected and converted is by no mean 100% accurate, due to a number of assumptions that were made in this stage of the project. However, the numbers presented in Table 1 can give students a good quantification as per the use of paper either at an individual level or at the country level. And therefore, can put their knowledge (Population and footprint) earned in the first part of the introduction to the environmental science course into action. This important step of the project presents with no doubt a chance for students to earn educational leadership skills such as objective and group work.

The second phase of the PBL experience, in the introduction to the environmental science course at Zayed University, focused on the ecological and biodiversity aspect of the course. After discussing the concept of ecosystem and the importance of each biodiversity component in various ecosystems. Students needed to find out which ecological resource is used to make paper. And therefore, quantify their previous data as per the ecological resource's consumption. The following table illustrates how much of a tree, Zayed University students, their families, their cities and the UAE are consuming:

Quantification of trees' consumption		
	Yearly paper consumption/Tones	Yearly tree consumption
Individual students	0.010017	0.170289
Student's family	0.070119	1.192023
Student's city population	20,065.99	341,121
UAE population	82,782.18	1,407,297
UAE active population	68,295.29	1,161,019

Table2: A summary of a yearly average tree consumption of a students' group that was part of the PBL project. (Summer 2013)

In this phase of the project based learning course, students needed to focus on quantifying the yearly tree consumption from an individual level to the country level. The introduction to the environmental science course students developed further their skills in understanding scientific concepts. Calculations and number projections were mainly made based on previous data for yearly paper consumption as well as on a known international conversion rate. Research in the field of paper manufacture has shown that in order to make 1 tone of paper, in average around 17 trees should be used. This conversion rate was published by Concervatree (a non-profit organization) based on a report to Congress in the USA in the 1970s. The rate was used to estimate the number of trees needed to make virgin

paper, without taking into consideration the type of tree, its height nor its diameter. Although other estimations were made after that, there will be always a need to more trees' specification. For the quasi quantitative nature of this work, the first rate was used keeping in mind that the data presented in this work provides environmental students course and researchers with only a good estimate of the number of trees as per their A4 paper consumption.

During the last phase of the project of the PBL introduction to the environmental science course, students needed to find out the main pollutant as per paper manufacture. Then, students had to quantify how much pollutant they were contributing with upon their average A4 paper yearly consumption. Table 3 presents a summary of data as per pollutant production.

Quantification of CO ₂ production		
	Yearly paper consumption/Tones	Yearly CO ₂ production/Tones
Individual students	0.010017	0.013623
Student's family	0.070119	0.095361
Student's city population	20,065.99	27,290
UAE population	82,782	112,584
UAE active population	68,295	92,882

Table 3: A summary of a yearly average CO₂ production as per paper consumption of a students' group that was part of the PBL project. (Summer 2013)

In a similar way to the previous phases of the PBL project, students needed to quantify their yearly contribution to the chemical production (mainly CO₂). Calculations have been performed starting from an individual level to the country level. And were mainly based on previous data for yearly paper consumption as well as on a known international conversion rate. In fact, data about how much pollutants are produced in the paper manufacture has been published and a rate of 1/1.36 tones of paper to tones of CO₂ has been used. (Learn more about paper, 2013) Other rates of pollutants' production as per paper production have been published and there were mostly close. Similarly and for the quasi quantitative nature of this work, the 1/1.36 rate was used keeping in mind that the data presented in the above table provides environmental students course and researchers with a good estimate of how much CO₂ is produced as per paper consumption.

At the end of their project, the introduction to the environmental course students have to look at their data and think about how they can avoid destroying trees and therefore saving ecosystems. In addition to minimizing the pollutants production. All of that goes under finding solutions to environmental problems. Students have been convinced upon their findings on the importance of using less paper in their everyday lives. They were encouraged to recycle, to avoid printing and to reuse paper.

In summary, this study supports the fact that project based learning is an effective and motivating approach for higher education students. The work has proved that students of the introduction to environmental science course in Zayed University have had the chance to earn various skills (Critical thinking, problem solving, science's inquiry) that are in accordance with the science requirement of general education courses in the university. Furthermore, students have had the opportunity to acquire few educational leadership skills (Objective, group work and motivation).

Study evaluation: To explore the impact of the project based learning approach on students' attitude toward acquiring various skills and educational leadership skills in specific, different instruments have been used during the time of the study (2012 Fall, 2013 Spring, 2013 Summer). Mainly an observation exercise, students' performance comparison and students' survey were used.

First, an observation exercise was carried out to investigate the in-class atmosphere and number of students who have shown involvement with the project work has been recorded in a weekly basis throughout the semester. The observation data obtained from the introduction to the environmental science course was analyzed and it has been shown that after few sessions, students have begun to take the initiative to start working, to ask questions and to discuss. Figure 2 shows the number in percent of students who have shown involvement in the project inside the classroom throughout the semester.

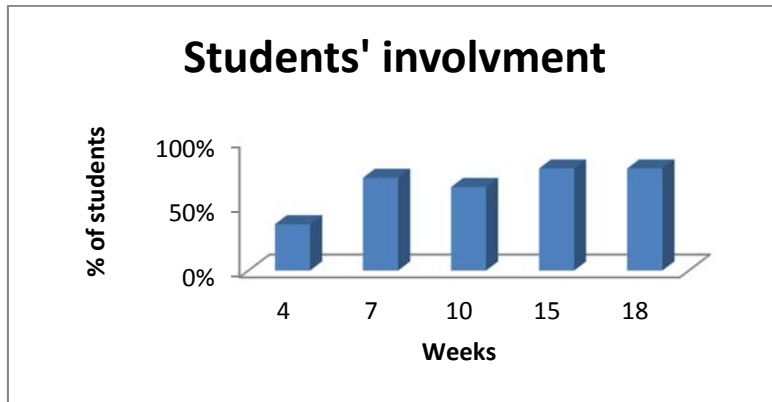


Figure 2: Example of a sample of data based on students’ involmment inside the classroom.(Spring 2013)

In the first week of the semester, the approach of PBL was introduced to the students of the introduction to environmental sciences’ course. The project’s goal and procedures were explained. After that students were engaged on data collection as per their daily and weekly paper consumption (A4). Each week a discussion time and project work period was given to the students. Data of the number of students who were involved in the project work versus time is presented in the above chart (Week 4, 7, 10, 15 and 18).

The results of the observation exercise conducted along the semester has shown that after few sessions, students have started to show their involvement by discussing within their groups or with their instructor. The rate of involvement has shown a positive increase with time as it goes from 40% of the students during week 4 to 80% toward the end of the semester. This observation part of the study has demonstrated that not only the PBL project provided students with opportunities to see the relevance of their earned knowledge, and make the connection between the subject content, the project and their own experiences. But also, it helped them earn educational leadership skills such as appreciating the objective behind their learning as well as working within groups and all of that can explain the higher percent of involved students at the end of the project compared to that at beginning of the semester.

Second, and in order to gather adequate data about the change of student’s attitudes toward their learning as well as toward their level of knowledge and skills, another data source was used. The overall students’ performance was analyzed in comparing a PBL introduction to environmental sciences’ course and a traditional introduction to environmental sciences’ course. The table below summaries letter grade numbers (A, B, C, D, F) within sections of the environmental courses taught in a traditional way, and those within sections of the same course taught using PBL.

Letter grades	Section 523 (Traditional)	Section 582 (Traditional)	Section 501 (PBL)	Section 511 (PBL)	Section 503 (PBL)
A	4.35%	0.00%	17.39%	28.57%	31.82%
B	30.43%	18.75%	43.48%	28.57%	45.45%
C	47.83%	62.50%	21.74%	42.86%	22.73%
D	13.04%	18.75%	17.39%	0.00%	0.00%
F	4.35%	0.00%	0.00%	0.00%	0.00%

Table 4: A summary of students’ performance. A, B, C, D, E are letter grades converted from the overall course

grades. A section is a class of students taking the same course. Sections 523 and 582 were taught traditionally during 2012 Fall semester. Sections 501 and 511 were taught using PBL during 2013 spring semester. Section 503 was taught using PBL during 2013 summer semester.

According to Table 4, there was a considerable difference in terms of achievement between the traditional group and the PBL group. Project based learning and the trial of implementing educational leadership skills seemed to improve the performance of students in the environmental course. Most of Zayed University students who enregistered in this course seem to find learning more meaningful by being motivated to take responsibility, to investigate and to bring their own input for their project. The data collected as per students' performance showed a general positive increase when comparing percents of A and B in traditional classes and PBL classes of the environmental course. (31.82% versus 4.34% for letter grade A. And 45.45% versus 30.43% for letter grade B respectively for sections 503 and 523). The opposite trend was observed for the percents of C and D. The data collected as per students' performance showed a general negative increase when comparing percents of C and D in traditional classes and PBL classes of the environmental course. (22.73% versus 47.83% for letter grade C. And 0.00% versus 13.04% for letter grade D respectively for sections 503 and 523).

At the end of the semester, an online survey was given to students of the enviromental course. The questionnaire contained ten questions, however , only 5 questions that are directly related to the study are presented here.

The project has helped me understand better the objective of the environmental course.	
Strongly Agree	35%
Agree	40%
Neutral	20%
Disagree	5%
Strongly Disagree	0%
While working on the project, I have liked working in groups.	
Strongly Agree	35%
Agree	35%
Neutral	8%
Disagree	18%
Strongly Disagree	8%

I believe that the project has helped me learn better in this environmental course.	
Strongly Agree	35%
Agree	38%
Neutral	22%
Disagree	2%

Strongly Disagree	0%
I believe that the project has helped me be motivated in this environmental course.	
Strongly Agree	40%
Agree	32%
Neutral	25%
Disagree	5%
Strongly Disagree	0%
I believe that the project has helped me perform better in my tests.	
Strongly Agree	30%
Agree	25%
Neutral	30%
Disagree	10%
Strongly Disagree	2%

Table 5: Survey results and students’ feedback on the project used in the PBL environmental course. (2013 Summer 2013)

Survey results showed that more than 70% of students indicated that the project helped them to understand the objective of the course and therefore to better understand the course concepts and keep them motivated. In addition around 70% of the students have shown positive feedback on group work. Table 5 shows that 55% of students believed that the project conducted in the introduction to the environmental sciences course has helped them to perform better in their tests. This relative low percentage can be explained by the fact that many students did not make yet the link between working on the project and learning. These students still think that the project is an assessment component of the course rather than a channel of learning.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this study supports the view that project based learning is an effective pedagogical approach in which students engage in intellectually challenging work that allow them to gain knowledge and educational leadership skills. At Zayed University, PBL enabled students of the introduction to the environmental sciences course to use real data, to quantify their funding and to comprehend the process of working on a project.

The project was designed to provide students enjoyable and effective environmental concepts learning. Students have put their knowledge in action. They have quantified paper consumption, ecological resource consumption and pollutant production. They have come up with real figures as per their individual, family, cities and the nation consumption. All of that has shown that well designed projects within the approach of PBL can be a real catalyst for students to gain quantitative reasoning, critical thinking and problem solving from the knowledge point of view. And to help them acquire skills such as the objective, group work and motivation. Indeed, in all phases of the study, it was rewarding to see the students interested during their PBL learning experience. It seemed obvious that students were more motivated, more focused, enjoying working in groups and performing better, compared with the students in the traditional course.

Finally, Zayed University can create an autonomous life-long learning environment by: Identifying learning objectives, employing learning approaches, using appropriate resources, training its faculties and spreading the awareness of the importance of the learning opportunities that exist inside classrooms.

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Present Situation of Bilingual Teaching in Universities of China and the Countermeasures

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ABSTRACT

Bilingual teaching is an important part of university's going global and educating multinational talents. It emphasizes the communication and interaction in classroom through a foreign language used in nonverbal majors and lessons. But nowadays, the significance of bilingual teaching in Chinese universities is not fully recognized. This paper, on the basis of questionnaire survey of three universities in Xi'an, Shaanxi Province, investigates the present situation of the bilingual teaching in universities of China. The existing problems include: the purpose of bilingual teaching is not clearly and correctly understood; incentive mechanism has not yet been formed; lack of classroom interaction affects students' interest in learning; curriculum is unreasonable; bilingual teaching staff is scarce; a number of students can't catch up with the teacher in class due to their low English proficiency; teaching materials are inappropriate. Some suggestive countermeasures are put forward to help deal with the above problems in order to promote bilingual teaching in Chinese universities.

Keywords: universities, bilingual teaching, questionnaire survey, countermeasure

INTRODUCTION

Bilingual education is an effective measure to promote the internationalization and teaching reform of higher education. Bilingual teaching emphasizes the communication and interaction in classroom through a foreign language used in nonverbal majors and lessons, so that students can achieve the dual purposes of learning profession knowledge and foreign language skills. Therefore, bilingual teaching proposes higher requirements for teaching staff, selected teaching material, teaching methods, and students' ability of learning. Despite the progress made in bilingual teaching, universities still face a variety of problems and obstacles.

This paper aims to explore the good ideas and reasonable measures for the improvement of bilingual teaching based on questionnaires survey of three universities in Xi'an, Shaanxi Province.

We have designed two questionnaires, one for teachers, and the other for students. There are 25 questions in the questionnaire for teachers, and 30 questions in the one for students. The questions in both questionnaires involve different aspects concerning bilingual teaching such as level of teachers, level of students, teaching method, curriculum, and other factors.

70 copies of teacher questionnaire are distributed and 55 copies are recovered; the recovery rate is 78.6%. 200 copies of student questionnaire are distributed and 180 copies are recovered; the recovery rate is 90%. The universities where the questionnaire survey is made include the North-West University, the Xi'an University of Posts and Telecommunications, the Chang'an University which are three different types.

PRESENT SITUATION OF BILINGUAL TEACHING IN UNIVERSITIES

(1) The purpose of bilingual teaching is not clearly and correctly understood

According to the questionnaire survey, 36 percent of teachers and 45 percent of students think the purpose of bilingual curriculum is to enhance students' foreign language proficiency and ability. This shows that universities do not recognize the differences between bilingual teaching and foreign language teaching. Bilingual teaching, in the eyes

of quite a lot of teachers and students, is no more than a process of lesson giving in which the teacher uses half Chinese and half English to speak and to write on the blackboard. Thus, despite the increased foreign language proficiency of students, the real purpose of bilingual teaching is distorted.

(2) Incentive mechanism has not yet been formed

The survey shows that an effective and reasonable incentive mechanism for bilingual teaching has not been formed. In the three universities surveyed, the teacher's payment from bilingual teaching is calculated according to the proportion of foreign language (mostly English) used in classroom. The higher proportion corresponds to the higher remuneration a teacher obtains from bilingual teaching. Usually the final remuneration is the multiplication result of the basic salary for an ordinary course and a coefficient. For example, in the Xi'an University of Posts and Telecommunications, four different coefficients are being used: 1.25, 1.50, 1.75, 2.0 which correspond respectively to 25%, 50%, 75%, 90% of foreign language used in the content of teaching. Although the income from bilingual teaching is higher than that from giving ordinary courses, it still does not match the efforts made by teachers. Teachers complain the low gains from bilingual teaching considering the demanding requirements for bilingual teaching: lesson preparation requires access to a larger reference, consumes more time and energy.

Inadequate incentives have negatively affected teachers' enthusiasm and effectiveness of bilingual teaching.

(3) Lack of classroom interaction affects students' interest in learning

The survey shows that the classrooms of bilingual courses are almost teacher-centered, not student-centered. Teachers indoctrinate what they think should be taught to students, while students have no much interest in learning. In some cases, what teachers do in class is just reading and translating textbook materials, neglecting the interaction with and response of students. Surely, this poor teaching performance affects the quality and effect of bilingual education.

(4) Curriculum is unreasonable

Course selection is random. The questionnaire survey tells us that bilingual courses are randomly and unsystematically selected in the three universities, not depending on the students' real demand but on whether or not they have teaching staff with good English. They do not take into account the degree of difficulty of the chosen courses and the influence on the students. Therefore students are not satisfied with the bilingual curriculum.

(5) Bilingual teaching staff is scarce

In China, training system for bilingual teachers has not been constructed. Normal universities do not have majors of professional bilingual teaching, and even theoretical and practical lessons about bilingual teaching are not available. Teachers who voluntarily give bilingual courses have not got any training; their opportunities to go abroad to exchange with their foreign counterparts are also very few. So the scarcity of qualified bilingual teaching staff with professional strength and high proficiency of English language is a big problem. Most of the teachers giving bilingual courses are either strong in expertise but poor in English, or vice versa. From the survey result, we can conclude that the scarcity of qualified teachers is the major obstacle constraining the development of bilingual teaching.

(6) A number of students can't catch up with the teacher in class due to their low English proficiency

Although there are some students in class who are able to understand the teacher well and perform actively, to have good interactions with the teacher, most students feel hard to follow the teacher because of their relatively low English level. Some students even see bilingual courses a burden that they have to take.

(7) Teaching materials are inappropriate

From the survey we can say that both teachers and student are not satisfied with the teaching materials. Some teachers use original English textbooks, some use domestic textbooks compiled by Chinese scholars, some even use the handouts prepared by teachers themselves. All of these teaching materials have advantages and

disadvantages. For example, the original English textbooks excel the other two types in content and structure, and they also reflect the cutting edge of natural and social sciences. But they are expensive to buy and difficult to understand. In addition, it is very possible that the original materials do not match the syllabus and course requirements. While, the other two types of teaching materials are cheap to buy and easy to understand, but they are not worth compliments because of the rough content, limited depth and flawed language expressions, which may mislead the students in learning.

SUGGESTIVE COUNTERMEASURES TO SOLVE THE ABOVE PROBLEMS

The significance of bilingual teaching in Chinese universities is not fully recognized so far, therefore we need to firstly change our attitude before taking any measures to improve the present situation, regarding bilingual teaching as an import part of university's going global and educating multinational talents. Bilingual teaching is different from ordinary teaching because it requires more efforts and broader vision. So, encouraging and supportive policies should be carried out, providing the teachers with incentives to do better in the classroom.

(1) Establish an effective and fair incentive mechanism

Firstly, it is essential to constitute a committee for bilingual teaching. The committee should consist of experienced academic staff and a number of excellent administrative staff with some educational background overseas. The function of the committee is to evaluate the performance of teachers through random visits to the bilingual classrooms and discussion with and get feedback from students. Those who get high evaluation should be granted with material awards and honor as well, and given preferential policies in title promotion.

Secondly, raise teacher's remuneration for bilingual teaching. As mentioned earlier, although the income from bilingual teaching is higher than that from giving ordinary courses, it still does not match the efforts made by teachers and has more or less negatively affected teachers' enthusiasm and effectiveness of bilingual teaching. Therefore, raising the remuneration from bilingual teaching according to the actual situation should be taken into consideration.

(2) Improve and innovate teaching method and means

The bilingual classroom should be student-centered. Teachers can use flexible ways such as ask-and-answer interactions, presentations by the students, discussions within the students to inspire and motivate the latter to engage in what are taught and to express their views and opinions.

Innovative use of IT in teaching is also helpful to making class more effective and efficient. Multimedia courseware can not only save time in writing on blackboard, expand the amount of information of classroom teaching, but also increase students' interests in learning through visual and sound information.

(3) Optimize Curriculum of bilingual teaching

Given the present problems in the setting of bilingual courses, curriculum optimization is essential. Some courses which are not easy to learn for students even when they are given in Chinese do not necessarily have to be taught in a foreign language. For example, most of the theory-oriented professional courses are not suitable for bilingual teaching. While for some courses which, though profound in theory, reflect academic frontiers and latest research progress, the attempt of bilingual instruction should be encouraged.

Particularly, most of the optional courses in humanities and social sciences can be considered being given in English. Take my own example: I have been giving a bilingual course named Ecological Crisis Humankind Is Now Facing for several years, totally in the language of English and have got very good evaluations from both my colleagues and students. In a teachers-students exchange about teaching and learning coordinated by the academic division of my university, some students suggest that more courses like Ecological Crisis Humankind Is Now Facing should be created for them.

(4) Take graded teaching method

The levels of students' foreign language abilities are uneven. So, bilingual courses should be classified into different categories according to the levels of students' foreign language (mostly English, as mentioned earlier) proficiency. Proportion of the foreign language used by the teacher should depend on students' acceptance and comprehension abilities. If there is no difficulty for the students to understand the lesson, native language is then not necessary. For those whose English is relatively poor, proportion of the foreign language used by the teacher can be lower, such as 25% or 50%, according to the actual situation.

In addition, in terms of the time arrangement for bilingual courses, we suggest that the second or the third year be the appropriate time. After one or two years of studying, students in the second or the third year have, to some extent, laid the professional foundation for further learning, and their English level has also improved. On the contrary, first year students are not fully prepared in both professional knowledge and foreign language ability, while the fourth year students are not very likely to concentrate on class learning due to their preparation for graduation dissertation writing, and particularly, to their time spent in job seeking.

(5) Strengthening teaching staff

There are several ways to strengthen and enhance the ability of teachers for bilingual courses.

a. Organize training programs to improve teachers' English level.

Foreign teachers in Chinese universities are a valuable resource that can be used in the training of bilingual teachers.

b. Send bilingual teachers to Foreign Studies Universities to get English training.

c. Organize interschool seminars about bilingual teaching regularly. Teachers can exchange with and learn from one another and share good experiences in terms of bilingual teaching.

d. Encourage teachers to go abroad to exchange with their foreign counterparts. Through this way, the bilingual teachers' professional knowledge and foreign language can be improved.

e. Recruit teaching staff from abroad according to the need of disciplinary development.

(6) Select appropriate teaching materials

As mentioned earlier, the three types of teaching materials being used include original English textbooks, domestic textbooks compiled by Chinese scholars and handouts prepared by teachers themselves. Considering the advantages and disadvantages of each of the three types, we suggest that the selection of teaching materials should depend on the students' level of acceptance and comprehension. The best choice, we think, is the original English textbooks which are less expensive and are not too hard for students to understand. Domestic textbooks are also a choice if they are of high quality. As to the handouts prepared by teachers themselves, we suggest that they should be reviewed by the bilingual teaching committee before selected.

In short, bilingual teaching is a big challenge for Chinese universities. It proposes higher requirements for teaching staff, selected teaching material, teaching methods, and students' ability of learning. Therefore, it requires efforts from various aspects.

Lost in the Shuffle: Urban African-American Students Cast Into a Rural White University in the United States

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ABSTRACT

This study involves interviews of approximately six African-American students attending a southern Appalachian University which shall be given the pseudonym Mountain University. Subjects were all between 18 and 24 years of age and came from a variety of academic disciplines. All come from cities which are much larger than the town bordering Mountain University (approximately 2,000 persons). The nearest large city is 100 kilometers (66 miles) away. Only 25 African-American students inhabit this campus of approximately 1200 mostly Caucasian students. The interviews conducted indicate that the students had excellent academic records and enjoyed their classes. They expressed themselves as feeling little of the effects of racism typical of the South of a few decades ago. This finding is in direct contradiction to many previous studies. These students uniformly found themselves bored on the campus. On the weekends, most of the other students left campus for their homes nearby, but many African-American students could not leave, partially because they, by and large, did not own automobiles and partially because their homes were often several hundred miles away. Thus, they had little choice but to stay on the campus. They generally found themselves isolated and unable to make many new friendships. One of the six interviewees plans to leave the university because of this isolation. Another theme that ran through the interviews was one of adjustment: adjustment to the white student culture, to the routines embedded into a small rural university, and to their need for entertainment and friendship, particularly on weekends. Adjustment to the academic life on campus was rarely found to be a problem. Student responses to an African-American interviewer were found to be substantially the same as those given to the White interviewer.

Keywords:

INTRODUCTION

This paper involves interviews of six undergraduate African-American students attending a southern Appalachian University which shall be given the pseudonym Mountain University. All subjects were between 18 and 24 years of age and came from a variety of academic disciplines. All came from cities which are much larger than the town which borders the university (approximately 2,000 persons) which is adjacent to the university. The nearest large city is 100 kilometers (66 miles) away. Only 25 African-American students inhabit a campus of approximately 1200 mostly white students.

This study is similar to many other studies which have examined the adjustments made by African-American students to colleges and universities with a preponderantly white population (Buckley, S.V., 2012; D'Augelle, A.R. & Hershberger, S. (1993); Gray, R. et al, 2013); Grier-Reid, 2013; Torres, K. (2009); Woldoff, R. A., Wiggins, Y. M., & Washington, H. M., 2011). Common findings amongst these studies were that "black students perceive greater racial tension and hostility in their environment, express lower levels of satisfaction and greater levels of isolation, and feel less identified with the institution than do white students (Thompson, C. & Fretz, B.R. 1991). Another study found that "African-American students reported significantly more racial-ethnic conflict on campus, pressure to conform to stereotypes, and less equitable treatment by faculty, staff and teaching assistants" (Ancis, J.R., Sedlacek, W.E. & Mohr, J.J., 2000, p.180). Several studies agreed that African American students attending predominantly Black institutions were happier and more adjusted than their counterparts in predominantly White institutions. (Constantine and Watt, 2002; Morley, K., 2003; Torres, K. (2009). African-American students were seen by Booker (2007) as giving "accounts of being harassed, mistreated, and experiencing institutional and individual discrimination. Furthermore, and most troubling, these negative experiences were often as a result of interactions with university administrators, faculty, and

classmates" (p. 179). Morely (2003) states that African-American students "are significantly less likely to graduate than Asian-American or White students at predominantly White institutions of higher education" (p. 147).

Racism is a common complaint found among African-American students in predominantly White colleges. Torres remarks:

Racism also remains a 'significant' factor in the lives of black students at majority white universities. Overt racist acts by white students are still commonplace and blacks are not treated as equals by white peers, faculty and administrators. They continue to be stereotyped as 'special admit' students and treated as 'second-class citizens who are not ready to compete with white students on an intellectual level. As a result, many black students come to feel alienated, isolated and estranged from mainstream life on white campuses. (2009, p. 884)

The concept of isolation mentioned by Torres is another theme that runs through much of the related literature. African-American students were isolated in many ways. They were often markedly outnumbered by Whites. "The large number of whites compared to the small number of blacks on campus makes this a wholly new experience with which they have had little direct experience" (Torres, 2009, pp. 892-3). Another form of isolation was the separation from their families. The intensity of this separation was considerably greater than that felt by their White peers (Morley, 2003). Morley found that:

. . . there was a pattern among minority students of noting how they missed their families when they came to college. The minority students described a closeness with their families from which they did not want to be away and a closeness they took active steps to maintain. (2003, p. 161)

This can be seen as important in the light of Tinto's (1993) theory of college student persistence. He addresses what he sees as a need for successful students to make a considerable separation from their prior relationships. "In a very real sense, a person's ability to leave one setting, whether physical, social, or intellectual may be a necessary condition for subsequent persistence in another setting" (p. 96).

Walpole (2007) notes yet another form of isolation: the social realm. "The social isolation African American students at PWI's [note: Predominantly White Institutions] experience may be compounded by low levels of involvement in student activities, in part because the activities offered are less appealing to African Americans" (p. 239). The society the African American student comes from can also be viewed as intensifying a sense of isolation. "Cultural values provide students with a map of appropriate and inappropriate behaviors. This has the consequence of prohibiting certain social activities for some students but not for others" (Swigart, T., 2001, p. 298).

METHODOLOGY

This paper utilized the principles of "classic" grounded theory, as espoused by Barney Glaser and Anselm Strauss (1967). The literature review was conducted after the fieldwork was completed and the data analyzed. This was done so as to minimize bias in formulating a theory explaining the statements of the participants. As Glaser (1978) explained:

The question continually arises as to what is the 'proper' pacing of reading the literature with the grounded theory process. The concern is brought out by the dictum to not contaminate one's effort to generate concepts from the data with *preconceived* concepts that may not really fit, work or be relevant, but appear so momentarily. The danger is, of course, to force the data in the wrong direction if one is too imbued with concepts from the literature. (p.31)

Six subjects were identified through purposive sampling. The Dean of Students, an African-American, selected the students using criteria involving individuals with high communicative skills. They were interviewed on campus and were often partially or fully interviewed by the Dean privately to verify that their answers were not biased by the presence of the primary researcher, who was a White professor. All interviews were recorded and notes were taken throughout by the Dean of Students and the primary researcher. Later, the notes and excerpts from the interviews were coded. Coding was done in accordance with concepts espoused by Allan (2003):

Grounded theory coding is a form of content analysis to find and conceptualize the underlying issues amongst the 'noise' of the data. During the analysis of an interview, the researcher will become aware that the interviewee is using words and phrases that high light an issue of importance or interest to the research. This is noted and described in a short phrase. This issue may be mentioned again in the same or similar words and again is noted. This process is called *coding* and the short descriptor is a code. (p.1)

The codes were analyzed using the Constant-Comparative Method developed by Glaser and Strauss (1967). This method continually compares data to data, data to concept, and finally concepts to emergent theory. Charmaz

(2006) states:

Coding is the pivotal link between collecting data and developing an emergent theory to explain these data. Through coding, you *define* what is happening in the data and begin to grapple with what it means. The codes take form together as elements of a nascent theory that explains these data and directs further data-gathering. (p.46)

Approximately twelve preliminary categories were found through the coding process, and two themes emerged as syntheses of these categories. One was Boredom (this is the word used by the subjects which seemed to encompass many forms of the theme of "isolation" seen in other studies). The other was Adjustment. These themes will be elaborated upon in the following section.

ANALYSIS

The subjects of this study were all polite, well-spoken, and motivated to succeed academically. They were all pleased with the progress they were making in their classes. They were far from home-most were admitted to Mountain University on scholarships. Few owned automobiles, and even if they did the distances to the cities they had come from made weekend travel home prohibitive. There were two interviewers-the primary investigator who was White, and the Dean of Students, who was African-American. Parts of some of the interviews were done separately, and the results were compared to ascertain whether the students spoke more candidly with the African-American Dean. No significant differences were noticed. The interview schedule questions all stemmed from the basic research question: "What are your perceptions regarding being an African-American student at Mountain University.

Adjustment

The African-American students in this study often referred to "culture shock" when first entering the institution. In spite of the difficulty of adjustment, only one of the subjects was considering transferring away from Mountain University. One pre-medical student said that:

As an African-American I feel that I have to show white people a different side of what they perceive black people to be.

Over and over, the subjects stated that they intended to graduate, and made it clear that they were doing well in their classes. Their academic performances were uniformly at least at a satisfactory level. The problems were cultural. One subject told the Dean:

I would say it's the Black and White thing. . . like I say that's really a small problem. . .

The Appalachian culture surrounding the college is markedly different from the urban environments which these students grew up in. One student remarked, particularly in regard to music:

There's nothing here for us. There is nothing that we can call our own. . . . They don't have the African-American fraternities and sororities here. . . . We don't have a radio station. . . it seems like everything around here is Bluegrass or Country. I don't have anything against it. There's nothing here-we make our own CD's and we have to find everything that we want. . . . Maybe they never thought about it. There's not many of us, but I think having these things would draw us here.

Several of the students were surprised that the small towns near the college could not give haircuts to African-Americans. The haircutting equipment necessary to properly cut their hair was different. Coming from much larger cities, the lack of variety was staggering. One stated:

Back home I'm used to a bigger place. I don't know that much about this town or Mountain County. That's one thing. . . that's a really really big adjustment.

In a surprising contradiction to the findings of previous studies, the African-American subjects declared uniformly that racism was not a problem. When asked to relate stories of racist incidents, they brought up what they made clear were isolated incidents. When asked if they had to deal with racism most responded as one math major did:

No. I do know some people that don't like mixed (racial) couples. . . . It bugs me at times but I just ignore it. It reflects on the way she was raised.

Another stated, without bitterness, that:

I really haven't had any negative experiences. I don't speak out because you know nobody going to

hear you out. . . . I don't want to make this a Black and White thing because there's more to it than that. I'm more cool with most of them (Whites) than I am with Black people.

Incidents had, nevertheless, occurred. The pre-veterinary student told a story about buying a refrigerator at Wal-Mart and having to take it back:

. . . and they say that we stole it. How can we steal a refrigerator that weighs about sixty pounds? The receipt number and the number on the refrigerator match up. . . and they were rude, too.

When asked if other experiences like this had occurred, the subject responded adamantly in the negative. Several students related incidents of racism, but insisted that they were isolated and not a problem. One female student experienced her first roommate as giving her the silent treatment, refusing to speak to her under any circumstances. She occasionally began to sleep in the room of a friendly White student and eventually changed roommates. There was no bitterness in her explanation-she simply moved on. It was clear to the interviewers that these were mature students who realized that some of the attitudes of their peers had to be tolerated. No subject felt that racism was a major factor in their dissatisfaction with Mountain University. Racism, in their eyes, was little in evidence and, should it arise, could be dealt with in a satisfactory manner.

Similarly, the students generally felt that their professors treated them fairly. There was one exception when one student felt that the Education Department had been particularly difficult for her because of formally unexpressed racial overtones. Though they reported occasional racial incidents involving the classroom, most felt that their academic life was well on track.

Students appeared to separate the lack of diversity as a much larger problem than overt racism. An art education major stated:

They preach diversity, but there is none.

The students often lamented the lack of a larger number of African-Americans on campus.

Boredom

The second theme which emerged in this study was boredom. It is a word used to describe campus life by all the participants. When asked what comes to mind first as a student at Mountain University, one student gave a representative reply:

Boredom. I'm easily entertained but there's nothing to do on campus. . . I don't like being bored. I'm a very high energy person. We go to Wal-Mart just to do nothing.

The lack of activity on the weekends was pointed out by all the subjects. One student said:

Nothin' here. If you want to go out and have fun you have to drive at least two hours. Basically you have to make up your own fun. Mostly it will drive you insane.

Students expected the numbers of blacks at Mountain U. to be low, but found the sparse Black population they faced when they took up residency on campus to cause problems that they had not anticipated.

Suggestions for Improvement

The subjects of this study made many suggestions for improvement. They included:

- An increase in African-American scholarships
- The establishment of African-American sororities and fraternities on campus
- Organized weekend sports, particularly basketball
- Weekend facilities for recreation such as laser-tag and roller-skating
- Organized dances and other social events
- Transportation to the nearest large city on weekends
- The establishment of a football team (this was seen as a vehicle which would bring in more African-American students.
- More awards and other forms of recognition which would apply to blacks.

CONCLUSIONS

Recruited as scholarship students and then unconsciously discarded, these subjects were relegated to years of on-campus monotony. They report that no one in power asked them how they felt about their life on the campus of this university. Their suggestions for improvement remained ineffectually dormant within their own constricted circles of friendship. The African-Americans, probably along with the international students and other minorities of Mountain University, found themselves marooned on campus for an average of four years.

This isolation might be considered trivial in the light of Mountain U's African-Americans' higher goals and hopes for lifetime advancement, but the social cost of four years of ennui to their bright young minds must be counted as a terrible loss. Beyond working on academic assignments, the weekends involve the heart of the remainder of the spare time these individuals possessed. For most of them, this time is spent with a few dozen other too-familiar students. If we regard a university as a vehicle to broaden and deepen our understanding of our world, then the world of these students has been seriously, unconsciously, and institutionally constricted. African-American students have been left spending weekend after weekend with little of interest beyond academics to occupy their time. Their White peers, meanwhile, routinely spend their extra time maintaining links to a wider world, leaving a small contingent on the campus invisible and silent. They have been separated from a broader culture by an unseen segregation, and find themselves unable to become members of a wider community.

We marginalize our minorities at our peril. They come to us with the unique gifts of their culture and character, yet these gifts remain largely ungiven. It is not only a loss of a part of the promise and hope education extends to these students-it is ultimately an injury to our wider society and a lowering of the robust possibilities diversity offers to our broader civilization.

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The Value of Experiential Learning in the Accounting Field

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ABSTRACT

The role of experiential learning in the accounting field is second to none. Workbooks have been used to facilitate the learning in this field for decades. Many of these workbooks are outdated, overwhelming and are not fully integrated with today's technologies. I have created a workbook specifically tailored to meet the needs and demands of my students which can easily be utilized at other educational institutions and perhaps for training in the work environment. The intention of this workbook is to provide source documentation comparable to those found in the work environment and have the students process this documentation to create accounting ledgers and financial statements. Students benefit from tying all of the accounting concepts and practices into one project that reinforces the theory and skills learned in the classroom.

Keywords:

INTRODUCTION

"The goal of teachers and scholars engaged in any institution of higher education is to train future business leaders and managers who are capable of making decisions based on knowledge which is learned and developed in our classrooms" (Devasagayam, John Masten, and McCollum, 2012). Workbooks are not a new concept in the field of Accounting. Though some believe that manual accounting practices have become obsolete, it can be argued that it remains the most useful pedagogical tool for teaching students the foundations of Accounting Principles. There are issues relating to both textbook exercises and accounting software in that it is difficult to tie the entire accounting process together. The textbook examples are generally too lengthy to be effective and the accounting process is not transparent when using accounting software. The accounting software does most of the manual labor for you, which is obviously a benefit in practice, but does not provide the student with a thorough understanding of the process. It is absolutely essential to understand the entire accounting process in order to accurately perform accounting tasks. Problems arise when there is a human error while inputting data. If the preparer does not understand the process, not only do they risk not finding the error, but they are unlikely capable of finding the source of the error or how to properly fix it.

The purpose of this paper is to analyze a short-coming in the teaching materials frequently utilized in Introductory Accounting courses and to hypothesize the cause of this short-coming. This analysis will define experiential learning and the value that it adds to the accounting field, identify changes in learning techniques related to generation Y students, and describe the product created to address the short-comings of previous accounting workbooks.

EXPERIENTIAL LEARNING

Utilization of a workbook provides a pedagogical tool that emulates experiential learning. Experiential learning (Kolb, 1984) equates to learning based on experiences. Numerous articles have been published on the topic, some specifically related to experiential learning in business, that identify the benefits and short-comings of this form of learning. Kolb's Experiential Learning Model incorporates 1) Active learning, 2) Concrete learning, 3) Reflective learning, and 4) Abstract learning to disaggregate the different styles of learning. Introductory Accounting demands a combination of theory and hands-on learning to achieve the successful transfer of knowledge from the instructor to the students (converger learning style). The first half of the course focuses on theory and the completion of textbook exercises to teach the basic concepts. The second half of the course demands a more hands-on approach, via the workbook, which provides the students with the opportunity to apply the theory and concepts learned in the first part of the course. As a practitioner in the Accounting field, I have seen first-hand the value that experiential learning

provides to students entering the accounting programs upon completion of their undergraduate education. These students arrive at the firms with greater confidence in their abilities which results in a more hands-on approach to performing their employment duties (with greater performance success). While a combination of learning styles can and should be used in Introductory Accounting classes, other styles of learning are required to transfer knowledge in classes such as Accounting Theory and Ethics. With regard to a study on preferred learning styles in an accounting Ethics course, "...a passive style appears to be preferred..." (O'Leary and Stewart, 2013) (reflective observation learning style). The topics that benefit most from experiential learning in accounting are those that require calculations and journal entries, such as the Introductory Accounting courses.

GENERATION Y

My decision to create my own accounting workbook came from feedback from my students while using a published workbook in class. The students had numerous complaints with regard to the material and the process. One of the major complaints was that the workbook was overwhelming – there were no places to stop and obtain feedback. This meant that once a mistake was made, the student would continue to complete the entire workbook unaware of their mistake(s). There were also complaints that some of the wording in the workbook was confusing and not well written. The entire class did agree on one very important point – they felt they had a greater understanding of the accounting process and the recording of transactions from doing the workbook than from using any other format of learning. The older workbook was no longer meeting the needs of current students – generation Y students. Generation Y have different attitudes and expectations with regard to learning and employment than those of past generations, "...members of generation Y can be accepted as highly consistent in their tendency to state less tolerance for the motive factors that they attach importance to" (Ordun and Karaeminogullari, 2013). Generation Y has very specific expectations of their instructors and employers and when those expectations are not being met, this generation actively pursues resolution to their issues. Also noted in many research papers is the short attention span identified in generation Y, "the average attention span hovers around 9 minutes" (Devasagayam, Johns-Masten, and McCollum, 2012) and the need for constant feedback. The personality changes in generation Y results in a need to adjust our teaching styles in the classroom.

THE MODERNIZED ACCOUNTING WORKBOOK

Due to the change in learning styles of generation Y, a new product was needed to successfully transfer knowledge in the classroom. The workbook I created is broken into five sections. It incorporates a complete month of transactions for a company, which happens to be the final month of the fiscal year. Having the exercise occur at the end of the fiscal period allows for a greater variety of transactions to be utilized which addresses another characteristic of generation Y, "Generation Y perform best when their abilities are identified and matched with challenging work that pushes them fully" (Lowe, Levitt and Wilson, 2008). The students submit the workbook to the instructor at the end of each section for partial marks and valuable feedback. The students can either hand-write all of their entries on the hardcopy of the worksheets provided or use their computers to record each transaction in a spreadsheet. Some students like the spreadsheets because they are easy to correct, are neater, and save time adding and subtracting, while others advise that they remember the material better if they hand-write their answers. Both methods require the students to record every transaction in detail – there are no steps skipped in the process. Thus, the workbook meets the students' needs by providing them with more challenging work but in "smaller pieces" so the work can be better managed and feedback can be obtained in a regular and consistent manner. This workbook also provides the students with an opportunity to utilize their exceptional technological skills.

TECHNOLOGY

Once the workbook has been completed, submitted for final evaluation and then returned to the student, they are required to enter all of the same data into an accounting program. They are provided with an opening chart of accounts (they will be required to add one or two accounts along the way to learn the process) and they are required to post the transactions to the software program as they did in the workbook. This process is significantly faster than the preparation of the workbook. They are provided with helpful hints and tips throughout the workbook to ensure they learn how to use the software properly and to ensure they are on the right track. Once completed, the file is backed up and submitted to the instructor for evaluation. This component of the workbook provides the students with an opportunity to apply the exceptional technological skills that generation Y is known for, "Generation Y is the most technically literate, educated and ethnically diverse generation..." (Lowe, Levitt, and Wilson, 2008). It also introduces them to technology that is actually used in accounting firms and businesses world-wide.

The final component of the learning process is to write an essay to be submitted at the end of the term comparing and contrasting the manual accounting process with that using the accounting software. This provides a more in-depth analytical component to the overall project which will contribute to the development of their critical thinking skills both in the classroom and in future employment.

There is great opportunity with this workbook to partner with an accounting software company and a publisher. There is potential to work with a publisher's online learning programs such as Lyryx (<http://www.lyryx.com/>) and MyLab(<http://www.pearsonmylabandmastering.com/northamerica/>) as opposed to using the spreadsheets. With regard to the utilization of accounting software, to date, students have used the trial version that can be downloaded from SAGE's website (<http://www.sage.com/>). There is potential to get approval to use student versions with the sale of the workbook.

CONCLUSION

In conclusion, the workbook I have created better facilitates student learning in the classroom environment than workbooks I have used in the past. I have not found another workbook with a comparable structure. I used this workbook format in the classroom as a pilot project in the previous year and, although there were some revisions to be made, it was much better received and accepted by the students than those used in previous years. I believe this workbook provides a more in-depth review and application of accounting procedures and the recording of transactions while providing a less stressful process for the students. The style of the workbook better facilitates the learning styles of generation Y students. It provides a smoother transition from the manual accounting process to the utilization of accounting software and requires that the student analyze and contemplate the accounting process and the pros and cons of the different methods of accounting. This project reinforces the demand and the benefit of experiential learning in the academic environment for this field of study.

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Proposal of a Methodology For Non-Formal Competences Certification

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ABSTRACT

The work aims to present a methodology for certifying the competences acquired in non-formal contexts.

Given the absence of a framework to respect, but following the criteria established by the "Council Recommendation of 20th December 2012 on the validation of non-formal and informal learning" (2012/C 398/01), a model, called "ABC – Competence: Analysis, Balance and Certification of Competences", has been developed. After the professional profile identification (i.e.: ESCO - European Skills/Competences, qualifications and Occupations classification), the model allows certifying the competence level acquired by the learner as a result of participation in a training course.

In the model definition it is significant:

- the identification of the trainer figure; he becomes the guarantor of contents and training methodologies choice and evaluates the actual acquisition of competences by the learner;
- the classification of competences (*knowledge/ability; hard/soft*);
- the identification of competence level, according to the European Qualifications Framework for lifelong learning.

Keywords: competence, non-formal, certification, balance

INTRODUCTION

The **model for non-formal competence certification** permits to evaluate and certify the competences acquired by learners of a vocational training course (CEDEFOP, 2009b).

Non-formal learning is different from formal learning because it takes place outside the formal school/vocational training/university system, through planned activities (e.g. with goals and timelines) involving some form of learning support, for example:

- programmes to impart work-skills, literacy and other basic skills for early school-leavers;
- in-company training;
- structured online learning;
- courses organised by civil society organisations for their members, their target group or the general public.

Instead, informal learning is not organised or structured in terms of goals, time or instruction. This covers skills acquired (sometimes unintentionally) through life and work experience, for example:

- project-management or IT skills acquired at work,
- languages and intercultural skills acquired during a stay abroad,
- IT skills acquired outside work,
- skills acquired through volunteering, cultural activities, sports, youth work and through activities at home (e.g. taking care of a child).

To develop a model for competence certification, you need to have a reference framework (Robinson, 2007),

currently not yet defined, but it's possible to follow the criteria dictated by the "Council Recommendation of 20th December 2012 on the validation of non-formal and informal learning" (2012/C 398/01) (European Parliament; Council of the European Union; 2007; European Parliament; Council of the European Union; 2008; Council of The European Union, 2012)

The model for non-formal competence certification is applicable to different types of competence, both manual/operational/craft and organizational/managerial/intellectual.

In general, it is possible to differentiate between **Hard and Soft skills** (ISFOL, 2013).

Soft skills are personal attributes that enhance an individual's interactions, job performance and career prospects. Unlike hard skills, which are the technical requirements of a job and many other activities, soft skills relate to a person's ability to interact effectively with co-workers and customers and are broadly applicable both in and outside the workplace (*Spencer&Spencer* and *Goleman Emotional Intelligence* models).

Competence certification must enable you to recognize and evaluate the acquisition in an individual of theoretical knowledge and practical skills, both highly technical and related to a specific work context, and transversal and useful in different working contexts.

Competence certification allows obtaining a whole profile certification or part of it (Franceschetti, 2012).

A partial classification of profiles and skills is already used in the European job mobility portal EURES and PLOTEUS (EURES, 2013; PLOTEUS, 2013). It exists in many languages and currently contains thousands of skill descriptions and job titles. It will be updated and enriched with additional descriptions of occupations, skills/competences and qualifications to become an important part of ESCO (European Skills/Competences, qualifications and Occupations classification) (ESCO, 2011).

The professional profile definition also helps deepen understanding of labour market needs and connecting education/training outcomes with jobs (Westerhuis, 2011).

Competence Certification Process

Systematic validation mechanisms is an enhancement tool for the individual making clear which skills are available in the European workforce (UNIONCAMERE, 2013):

- facilitating a better match between skills and labour demand, addressing skills shortages in growing sectors;
- promoting better transferability of skills between companies and sectors;
- helping citizens move around the EU to study and work.

As previously mentioned, the competence is a structured set of knowledge (to know) and skills (to know how) to be used independently in work or study situations and in professional and personal development. Therefore, certify a professional profile (set of competences) means attest knowledge, skills or "*the ability to use knowledge and skills independently in real-life contexts*" (competence), depending on the profile characteristics.

Conceptually, a person could be skilful but not competent, in the sense of lacking the necessary theoretical knowledge in a particular field.

Wanting to restrict the certification of skills in non-formal learning contexts, the model for competence certification will aim the investigation, according to the specific course characteristics, of:

- theoretical concepts acquisition (*knowledge certification*);
- practical ability acquisition (*skills certification*);
- the joint acquisition of theoretical concepts and practical abilities, knowing how to use independently in work situations (*competence certification*).

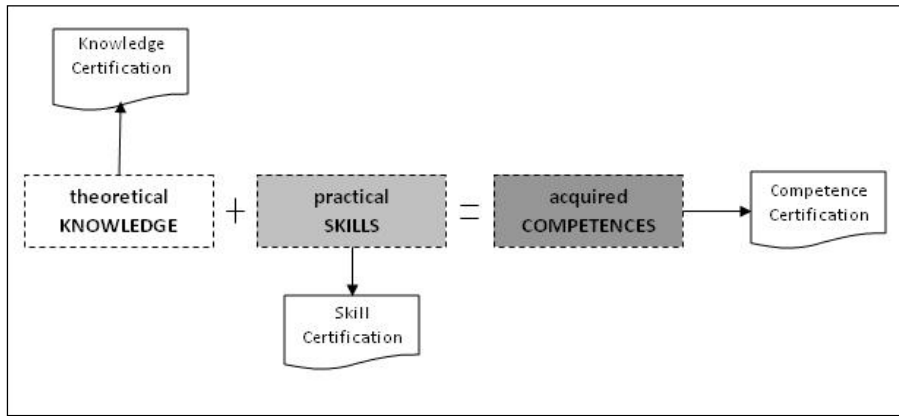


Fig. 1 – Certification process

“ABC-Competence” Model: Analysis/Balance/Certification of Knowledge/Skills/Competence

The proposed model, called ABC-Competence (Analysis/Balance/Certification of Competences) provides three possible investigations:

1. Certification of acquired competences:

Assessment of matching between the proven competences and the reference standard.

2. Balance of competences, input and output:

Assessment of the competence level growth as a result of participation in the course.

3. Training requirements, satisfied and to satisfy:

Evaluation of learners expectations and their satisfaction.

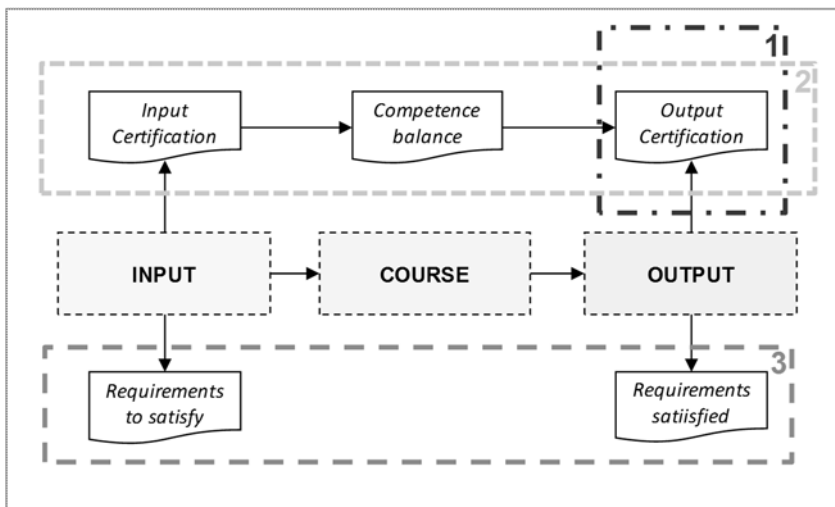


Fig. 2 – Certification model scheme

1. Certification of competence

The assessment of a candidate competences is based on the comparison between the proven skills and a reference standard.

If a conformity between the assessed competences and the reference exists, the certification process is successful and the learner can obtain a certificate of competence with evaluating the possessed level.

Therefore, the major difficulty for the competence certification is the definition of competence indicators (an element or a set of elements, able to report or provide information about property of a particular competence).

The set of indicators attributed to a competence defines distinctive and ascertainable criteria that make clear the competence acquisition, in reference to the application context.

On the basis of the Council Recommendation of 20th December 2012, cited above, each certification process takes place through the following four steps:

- **Identification:** phase aims to identify and define the competences amenable to a certifiable standard;
- **Documentation:** phase of evidence gathering and/or testing, aimed to document the competence possession
- **Evaluation:** phase of verification of competence possession (according to criteria and indicators referring to predefined standards) and assessment of the achieved level;
- **Certification:** phase which concludes the certification process. It consists in releasing standardized documents that certify the competences assessed, according to defined rules.

The following flowchart (Fig. 3) shows the activities to be performed within the different phases and related responsibilities.

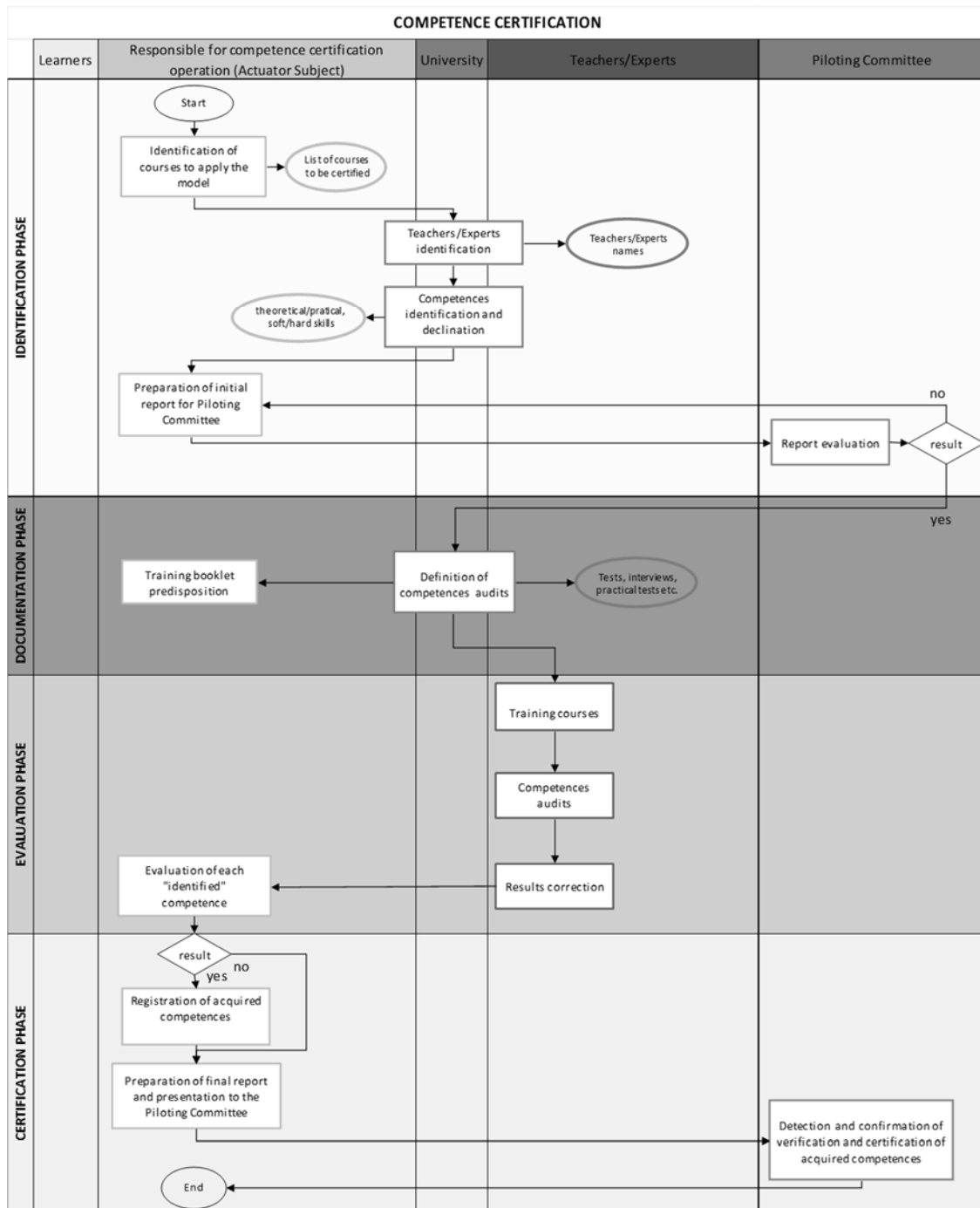


Fig. 3 - Flowchart of skills certification (phases-activities-responsibilities)

Given the absence of a framework to evaluate the acquired competences, it becomes essential entrusting the non-formal education and, consequently, its effectiveness evaluation, to experienced trainers in the professional profile that you intend to form.

Furthermore, only “an authorised body confirms that an individual has acquired learning outcomes (knowledge, skills and competences) measured against a relevant standard” (*Council Recommendation of 20th December 2012 on the validation of non-formal and informal learning*) (UNESCO, 2011).

Therefore, the qualified teacher becomes the guarantor of contents and training methodologies and evaluates the actual acquisition of competences by the learner (Dreyfus et al., 1980).

The trainer qualification (as in other areas, such as Health and Safety at Work) is based on his documented and provable previous experience.

To qualify the teaching staff, you can refer to the guidelines for the European Social Fund 2007-2013 reporting, which identify three levels of teaching:

Group A: requires at least ten years of experience and includes university professors, senior researchers (research managers, early researchers), business executives, entrepreneurs, industry experts and professionals;

Group B: requires a minimum of three years of experience and includes university researchers, industry experts and professionals;

Group C: includes university researchers, industry experts and professionals with less than three years of experience.

The University will ensure that trainers have the necessary technical and professional requirements (Teachers of Group A, B or C).

The presence of such expert figures will produce a training course adequate to the profile to be formed and, consequently, will certify the acquisition of specific skills, whether theoretical/practical (*knowledge/ability*), technical/transversal (*hard/soft skills*).

In order to base the competence assessment on correct and reliable data, expert trainers, supported by the University, will adopt an audit (questionnaire, test, interview, practice test etc.), opportunely defined.

For example, if the chosen tool is the questionnaire, a question with three answers (only one correct), for every two hours of training, will be prepared by the teacher, who will have also to provide information about the question characteristics:

- **Valence: theoretical / practical** (assessment of knowledge or ability, respectively);

- **Nature: transversal / technical** (assessment of soft or hard skills, respectively).

The criteria to be satisfied in order to demonstrate the competence, will be implicitly defined by the definition of the questions. Obviously, they are inextricably linked to the course content.

In particular, soft skills are generally grouped into four main macro-categories (Personal, Relational, Cognitive and Organizational), instead, technical ones will be identified according to the professional profile considered.

The question structure could be as follows:

Scheme of question

	QUESTION:	VALENCE:	NATURE:
1 question with 3 answers (only one correct), per every 2 hours of training	<ul style="list-style-type: none"> ○ Answer 1 ○ Answer 2 ○ Answer 3 	<ul style="list-style-type: none"> <input type="checkbox"/> Theoretical (<i>knowledge</i>) <input type="checkbox"/> Practical (<i>ability</i>) 	<ul style="list-style-type: none"> <input type="checkbox"/> Transversal (<i>soft skills</i>)* <input type="checkbox"/> Technical (<i>hard skills</i>)**

Choose the investigated COMPETENCE:

*

- PERSONAL: awareness of strengths and weaknesses, target orientation, manage their own emotions and behaviors, stress management.
- RELATIONAL: listening skills, social skills and empathy, communication skills, persuasiveness and influencing skills;
- COGNITIVE: analysis and synthesis skills, problem solving, logical and / or mathematical reasoning, creativity;
- ORGANIZATIONAL: planning skills, time management, control ability, flexibility.

**

TECHNICAL/PROFESSIONAL SKILL (PROFILE) _____

Example of question for the assessment of a transversal knowledge:

1 question with 3 answers (only one correct), per every 2 hours of training	QUESTION:	VALENCE:	NATURE:
	What is 2+2?	X Theoretical (knowledge)	X Transversal (soft skills)*
	<input type="radio"/> 3	<input type="checkbox"/> Practical (ability)	<input type="checkbox"/> Technical (hard skills)**
	<input type="radio"/> 4		
	<input type="radio"/> 5		

X * COGNITIVE: logical and / or mathematical reasoning

Example of question for the assessment of a transversal ability:

1 question with 3 answers (only one correct), per every 2 hours of training	QUESTION:	VALENCE:	NATURE:
	If two children have two sandwiches each, how many sandwiches together?	<input type="checkbox"/> Theoretical (knowledge)	X Transversal (soft skills)*
	<input type="radio"/> 3	X Practical (ability)	<input type="checkbox"/> Technical (hard skills)**
	<input type="radio"/> 4		
	<input type="radio"/> 5		

X * COGNITIVE: logical and / or mathematical reasoning

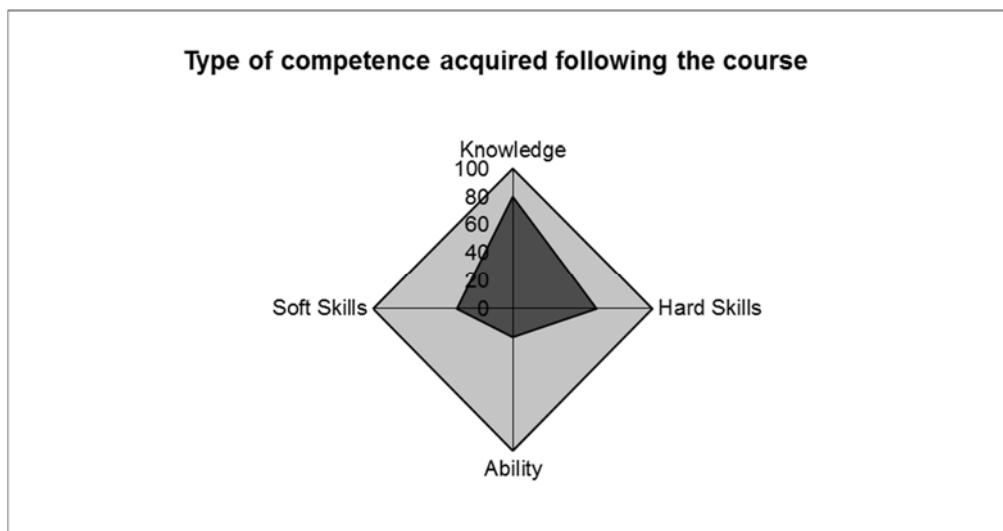
The choice of the questions allows defining the region of competence investigated, valence (knowledge / ability) and nature (soft / hard skills); then, by analyzing the answers given by each learner, it will be possible to value his level of possession.

For the choice of the possession levels, we referred to the descriptors of the *European Qualifications Framework* for lifelong learning (EQF) (European Commission, 2008a; European Commission, 2008b). According to this framework, we can establish 8 levels, related to the learning outcomes and to the possession of knowledge, skills and competences. The rating scale suggests the levels and ratings listed below:

- **Excellent (score 9-10):**
critical and in-depth knowledge of the topics, commendable competence level.
- **Outstanding (score 8-9):**
extensive knowledge of the topics, very good competence level.
- **Good (score 7-8):**
satisfactory knowledge of the topics, discrete / good competence level.
- **Average (score 6-7):**
essential knowledge of the topics, just enough competence level.
- **Mediocre (score 5-6):**
fragmentary knowledge of the topics, modest competence level.
- **Insufficient (score 3-4):**
incomplete knowledge of the topics, level of competence not sufficient.
- **Poor (score 2-3):**
very sketchy knowledge of the topics, grossly inadequate competence level.
- **Null (score 0-2):**
no knowledge of the subjects, competence level very low or nil.

In line with the European Qualifications Framework (EQF), all Member States are in the process of developing National Qualification Frameworks (NQFs), which describe qualifications in terms of learning outcomes (CEDEFOP, 2013a; ISTAT, 2009; Coles, 2007).

The distribution of questions among the different types of skills investigated, can be summarized through a Radar graph, which allows us to delineate the region of the skills acquired thanks to the course (Fig. 4).

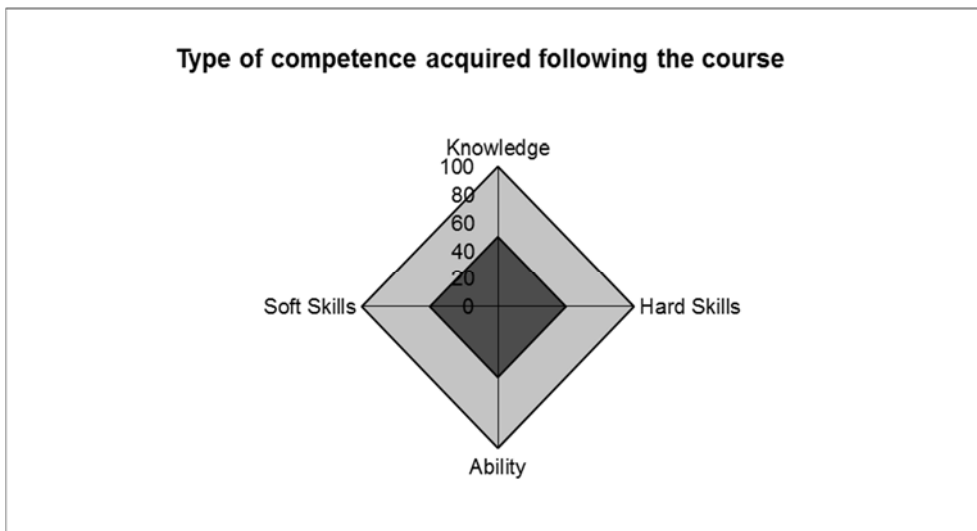


<i>Question type</i>	% total	% questions
Knowledge	100%	80%
Ability		20%
Hard Skills	100%	60%
Soft Skills		40%

Fig. 4 – Definition of the region of competence investigated

The darker polygon indicates how many questions compared to the total (clearer polygon), refer to knowledge rather than ability or hard skills rather than soft skills.

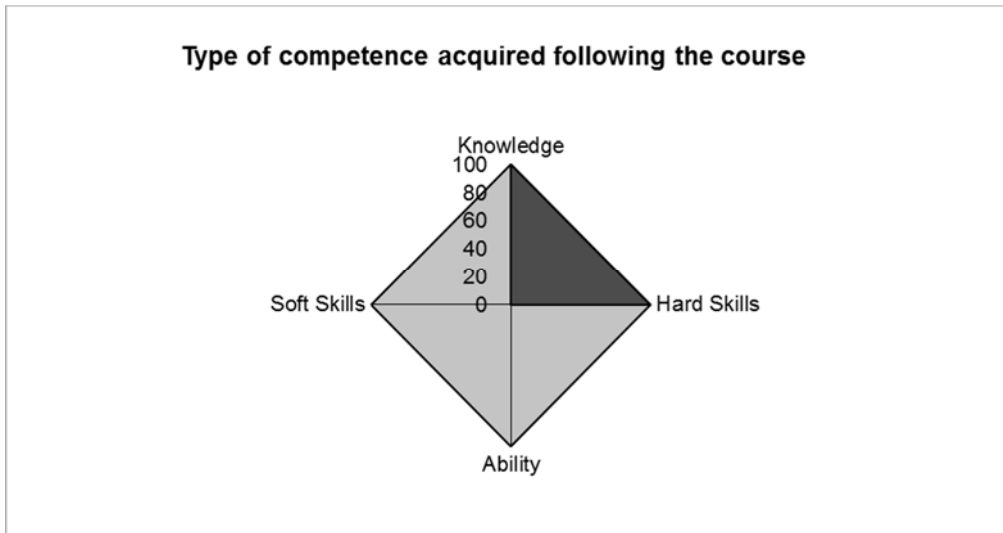
For example, in the case of questions half and half theoretical and practical, rather than half and half transversal and technical, the radar graph will be as follows (Fig. 5).



<i>Question type</i>	% total	% questions
Knowledge	100%	50%
Ability		50%
Hard Skills	100%	50%
Soft Skills		50%

Fig. 5 – Example of Representation 50-50, theoretical-practical and transversal-technical

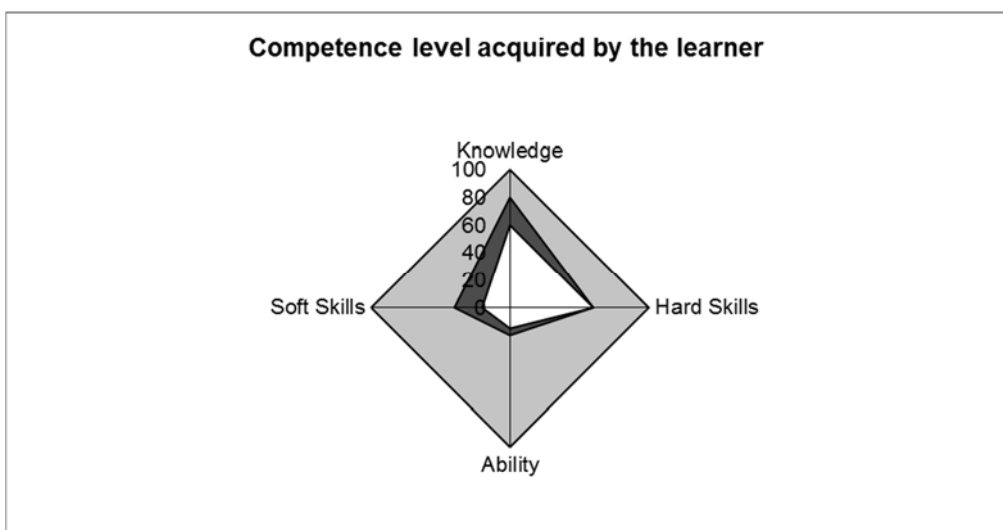
Instead, in the case of questions only theoretical and technical, we have the following representation:



<i>Question type</i>	<i>total</i>	<i>%</i>	<i>% questions</i>
Knowledge	00%	1%	100
Ability			0%
Hard Skills	00%	1%	100
Soft Skills			0%

Fig. 6 – Example of representation only theoretical and practical questions

In the same way, it is possible to represent the level of skill possessed / acquired by each learner (Fig. 7).



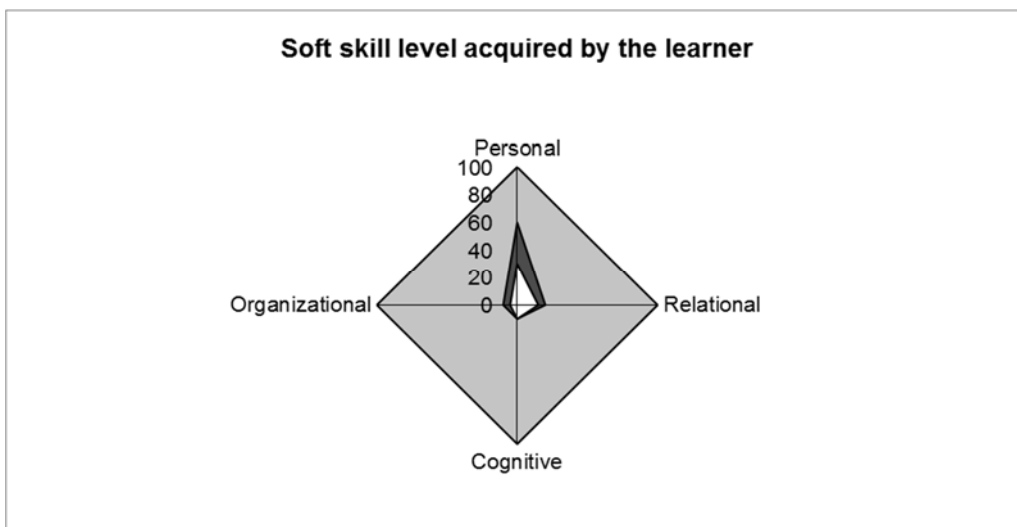
Question type	% total	% questions	gained level
Knowledge	100%	80%	6
Skills		20%	6
Hard Skills	100%	60%	8
Soft Skills		40%	4

Fig. 7 – Representation of the level of skill possessed / acquired by the learner

The innermost polygon (white color) indicates the level of skills possessed / acquired by the learner, referring to the competence region of the course (darker polygon), calculated on the basis of the correct answers for the different types of investigated skills. If all answers are correct, the white polygon overlaps the darker one.

Obviously, thanks to the information about the question type, provided by the teachers, it is possible to make a more detailed assessment and proceed to the **certification of specific skills**, to be included in the certificate which will be issued to the learner.

You can, for example, evaluate and represent which types of soft skills are investigated and owned by the learner (Fig. 8).



Soft Skill type	% total	% questions	gained level
Personal	100%	60%	4
Relational		20%	6
Cognitive		10%	6
Organizational		10%	8

Fig. 8 – Representation of the soft skill level possessed /acquired by the learner

The same analysis can be done for technical skills, related to the particular professional course.

In fact, the type (valence and nature) of questions to be asked, can either be chosen by the teacher both defined in the design phase to force the contents towards the development of specific skills.

2. Balance of input and output competences

A further aspect of the assessment could investigate the growth concerning learner knowledge/skills/competence level, as a result of attending a specific course.

For this purpose, the questionnaire introduced in the previous paragraph should be made before starting the course and administered in both at the beginning and at the end.

By the collected results, the effectiveness of the training in competences increase and, consequently, the value of the trained person will be monitored.

The possibility of evaluating the competence increasing, will obviously depend on the specific course duration.

In the case of short courses, less than 40 hours, it's expected a single check at the end of the training.

In the case of long courses, exceeding 40 hours, it will be possible to evaluate the growth, for example, through the administration of two questionnaires, at the beginning and at end of the course, achieving an "in and out" competence balance.

The questions will be similar for both tests, so you can really evaluate the effectiveness of training activities. It will be changed the order and wording of the questions and some will be even redundant, so you can verify the effective knowledge of the answer by the learner.

3. Competence analysis

In order to analyse the most important training deficiencies perceived by the learner, will be necessary to provide questions, aimed at understanding the training needs satisfied and those to be met.

- Ex ante: the learner in self-assessment can determine how much he expects that the course is relevant to his studies or how much he believes it useful for his career;
- Ex post: the learner, still in self-assessment, can determine how much the course has corresponded to his expectations and how will be (if measured immediately after the course) or was (if assessed after time from the end of the course) useful to his work.

Competence Certification Module

The certification process must be completed with the declaration of competences possessed by the learner, also according to the principles of transparency and comparability promoted by the European Union (CEDEFOP, 2005; CEDEFOP, 2009a; CEDEFOP, 2013b; CEDEFOP, 2013c).

The proposed certification module will be similar to the one established by the Italian Ministry of University and Research for the certification of basic competences in the major cultural areas (Language, Mathematics, Science-Technology, History-Social).

The certificate will list the competences acquired by the learner, in terms of knowledge and skills, divided into technical and transversal ones.

In order to monitor the professional growth of the learner, will be set up a training booklet, containing information about all the courses attended and the achieved results, including details of tested and certified competences.

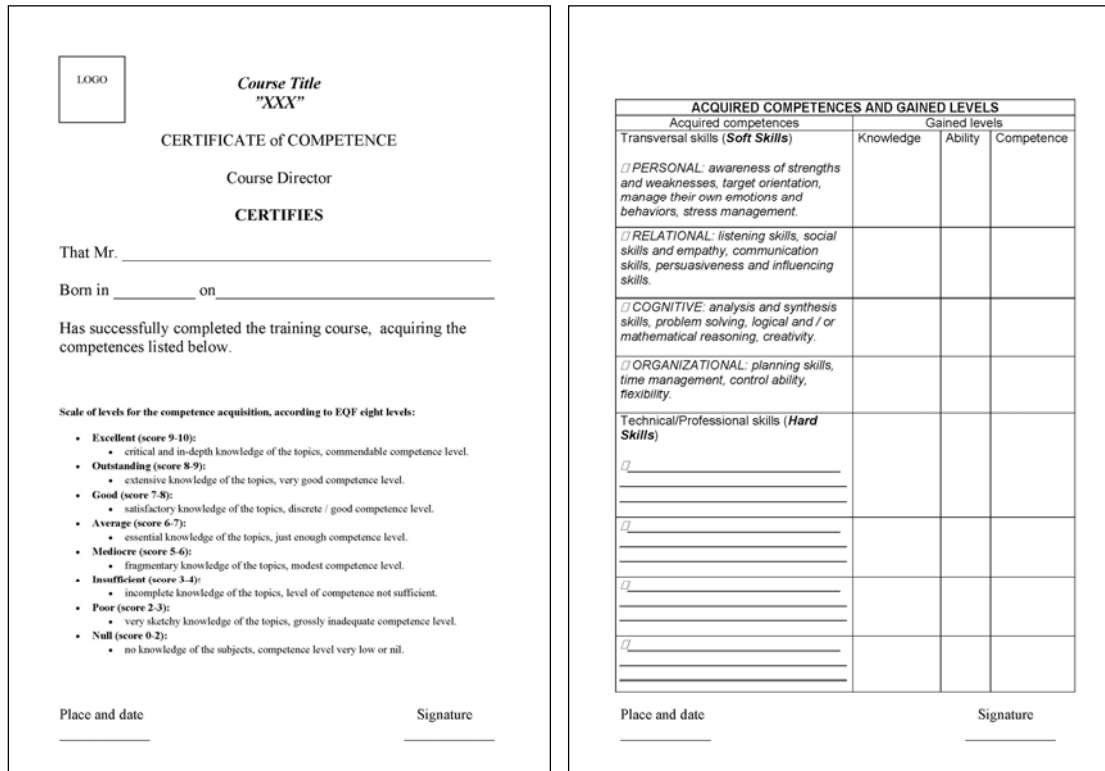


Fig. 9 – Fac-simile of Certificate for Training Booklet

RESULTS AND FUTURE DEVELOPMENTS

The simplicity of the proposed methodology ensures easy application in different educational contexts. In particular, its implementation is taking place in some training courses carried out by Confindustria Perform Srl, part of Fondimpresa 2012.

The expected results will then be analysed in order to understand potentialities and limitations of the ABC-Competence model.

The generality of the methodology allows adapting it to the current evolution of the European regulatory framework.

CONCLUSIONS

In the present work a methodology for certification of competences acquired in non-formal contexts is proposed, in a framework constantly evolving.

The "ABC-Competence" model, after identifying professional profile (set of competences) to be investigated, permits to certify the level of competence achieved thanks to the participation in a training course.

Three different certifications of acquired competences are proposed, depending on the survey you want to lead (Analysis / Balance / Certification); a possible certification module, based on the EQF levels has been also presented.

The development of specific competences (theoretical and practical, rather than transversal and technical), can be followed through the creation of a special training booklet, which the learner must take care to update.

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Effects of Inquiry-based Instruction: Case Study of a Marine Technology School

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ABSTRACT

This aim of this study was to explore the learning effectiveness of inquiry-based instruction among vocational high school students. The sample consisted of 20 students at a maritime polytechnic vocational high school in southern Taiwan, and the instruction focused on the laboratory practices for assembling and disassembling power equipment. We used a single-group design and conducted pre- and posttests to measure changes in basic capabilities, motivation for and interest in studying science, and performance on a skill examination table.

The study results indicate that inquiry-based instruction significantly improved the basic academic abilities and skills of students. This improvement was especially pronounced with respect to the self-efficacy and performance goal dimensions related to the motivation to study science. No significant differences were found for the three dimensions related to interest in studying science attitude toward science, learning atmosphere, and student engagement.

Keywords: Inquiry-based instruction, Science learning, Learning effectiveness

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INTRODUCTION

The rapid pace of technological and scientific advancement constitutes a megatrend that has come to dominate the training of workers for and the very nature of various enterprises. In this context, the educational aims of vocational education are not only to provide students with those skills that are currently needed for participation in the production sectors but also to train students to think so that they can succeed in the increasingly complex environments and the multiplicity of trends in which many enterprises operate.

The Republic of China's Ministry of Education issued the report "Reshaping Technological-Vocational Education, Section II" providing policies to facilitate the use of vocational education to help students acquire the skills required by various industries and to provide workers for high-tech sectors. The report addresses the use of flexible curricula, selection by substantial practices, the enhancement of pragmatic skills, and the reshaping of careers. Furthermore, the National Science Council of the Republic of China also proposed the High Scope Program in 2006 to help middle schools use newly developed technology to design curricula and adopt inquiry-based instruction. It encouraged students' self-motivated problem-solving, curiosity about science, and motivation to learn, and it established a learning model designed to facilitate student-initiated exploration and thinking.

The United States National Research Council (NRC) has already established inquiry-based instruction as one of the teaching standards for science education. This approach is among the most important methods adopted by science educators (Banerjee, 2010).

The learning activities involved in scientific exploration may benefit students by helping them develop critical thinking skills and individual knowledge structures (Schneider, Krajcik, Marx, & Soloway, 2002). Thus, inquiry-based instruction may help students understand how to identify problems, autonomously seek answers, and develop and verify solutions. These skills are so-called "portable capabilities," a status that underscores their importance. The use of "inquiry" to describe this approach refers to its reliance on an active learning process that allows students to answer research questions via data analysis (Bell, Smetana, & Binns, 2005). Inquiry-based instruction is student oriented, although instructors may direct students at appropriate times according to the requirements of the situation. Beginners may need more instruction so that they can engage in the process of inquiry more effectively (Zangori, Forbes, & Biggers, 2012). In regard to content, the NRC asserted that inquiry involves five processes: hypothesizing, investigating, observing, interpreting, and evaluating (Banerjee, 2010). According to Wheeler and Bell (2012), inquiry involves a different set of five processes related specifically to identifying a problem: collecting data, interpreting data, developing alternative interpretations, presenting results, and verifying results. Additionally, inquiry

can be categorized into the following four types: (1) verification inquiry, where a set of questions, approaches, and solutions is provided by instructors; (2) cascades of structure; (3) guided inquiry, where instructors provide questions for further inquiry; and (4) open inquiry. Moreover, Wheeler and Bell (2012) also noted the possible influence of certain myths about inquiry-based instruction. One of these is that although this approach may be helpful for students, it is difficult for instructors to implement. In fact, this method is appropriate for science education at any level and for any grade.

Considerable research has been conducted on inquiry-based instruction. For example, Gormally, Brickman, Hallar, and Armstrong (2011) implemented an inquiry-based curriculum in a college biology laboratory classroom, and Marshall, Lotter, Smart, and Sirbu (2011) performed a comparative analysis of two inquiry-based observational protocols to better understand the quality of teacher-facilitated inquiry-based instruction. Additionally, Marshall and Horton (2011) explored the relationship between inquiry-based instruction and higher-order thinking in students. Moreover, Wang, Wang, Tai, and Chen investigated the effectiveness of inquiry-based instruction among students with different levels of prior knowledge and reading abilities. The present study was based on a call issued by the High Scope Program of the National Science Council of the Republic of China to conduct experiments in inquiry-based instruction teaching with the aim of understanding the learning efficacy of inquiry-based instruction among vocational high school students, focusing particularly on basic capabilities in specific subjects, motivation for and interest in studying science, interest in inquiry-based instruction, and the ability to apply scientific skills to specific subjects.

RESEARCH DESIGN AND IMPLEMENTATION

1. Participants

The study sample, which was selected using purposive sampling, consisted of third-year students in two classes at a vocational school in southern Taiwan. Of the 72 students in the two classes, the 20 attending the course on laboratory practices for disassembling and assembling power equipment (hereafter, "Power Operation course") from September to December in 2012 were chosen to participate in this study.

2. Description of instruction

The Power Operation course examined in this study was primarily focused on laboratory practices. The pedagogical process underpinning inquiry-based instruction includes sections emphasizing motivation, instruction, collective lab practices, group lab practices, inspiration, review questions posed by students, additional practices, verification, and interpretation. For example, the instructor in the Power Operation course attempted to increase students' motivation by asking questions such as "Why can't the engine be disassembled?" and "Why can't the engine be assembled?" and so on.

3. Research instruments

The following four research instruments were employed in this study:

(1) Cognitive domain: Basic capabilities

The examination in this domain included 10 multiple-choice questions and five inquiry-based questions based on the theories presented in the "two-way specification table." It tested three cognitive "layers" that were addressed in the course: theory, operation, and application. It subsequently posed questions about subtopics within these three layers.

(2) Affective domain: Motivation for and interest in learning science

The questionnaire used to examine this domain was based on the Learning Motivation Scale for Elementary School Nature and Life Technology Courses and the Questionnaire on Learning Interest for Elementary School Science Courses developed by Wu (2007), both of which have excellent validity and effectiveness. The motivation tool includes five dimensions: self-efficacy orientation, learning-goal orientation, performance-goal orientation, value orientation, and learning participation; these dimensions have also shown excellent validity and effectiveness. These questionnaires used a five-point Likert scale, and higher scores reflect more motivation for or interest in learning science.

(3) Psychomotor domain

As this study was specifically designed to measure skills, we used self-edited skill examination tables involving four tasks: replacing an engine, replacing a continuously variable automatic transmission mechanism, replacing tubeless tires, and replacing disc brake pads (shoe linings).

4. Domain context

This study was conducted at one of four maritime affairs vocational school in Taiwan; the school used in the

study is located in southern Taiwan. This study was designed to support the High Scope Program promoted by the National Science Council of the Republic of China, which emphasizes the integration of new scientific and technological developments into school curricula and teaching as part of its mission. Schools participating in the High Scope Program must formulate innovative instructional programs for newly developed technologies and employ inquiry-based instruction to conduct a three-stage program including a trial of the instructional approach, an experiment to test its effectiveness, and appropriate modifications of the approach. The results of this experiment may be applied to other maritime affairs vocational schools. The main purpose of inquiry-based instruction is to develop students' ability to formulate questions, actively explore, and solve problems.

5. Data analysis

All data collected for this study were analyzed with a commercially available SPSS program. The statistical analyses included descriptive statistics, means, standard deviations, and *t*-tests.

RESULTS

1. Cognitive domain

Table 1 presents the results of the basic capability pretest and posttest for the Power Operation course. Table 1 shows that the mean score significantly improved, from 23 to 96.6, between the pretest and the posttest.

Table 1 Results of Basic Capability Pretest and Posttest among Vocational School Students in the Power Operation Course (*N* = 20)

	Pretest (<i>n</i> = 20)		Posttest (<i>n</i> = 20)		<i>t</i>	<i>p</i>	95%CI	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			LL	UL
Basic capability examination	23.00	5.93	96.50	4.01	-50.88	<i>P</i> < .001	76.52	-70.48

2. Affective domain (motivation to learn science)

Table 2 presents the pretest and posttest results regarding vocational students' motivation to learn science. Table 2 shows that the mean self-efficacy score on the pretest was 3.68 and that on the posttest was 4.17.

Table 2 Results of Pretest and Posttest regarding Motivation to Learn Science among Vocational School Students in the Power Operation Course (*N* = 20)

Motivation to learn science	Pretest (<i>n</i> = 20)		Posttest (<i>n</i> = 20)		<i>t</i> -value	<i>P</i> -value	95%CI	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			LL	UL
Self-efficacy	3.68	.58	4.17	.54	-3.72**	<i>p</i> < .01	-.77	-.22
Learning-goal orientation	4.03	.56	4.25	.56	-1.39	<i>p</i> > .05	-.56	.11
Performance-goal orientation	3.29	.33	3.76	.67	-2.98**	<i>p</i> < .01	-.79	-.14
Value orientation	4.27	.49	4.33	.54	-.51	<i>p</i> > .05	-.31	.189
Test anxiety	3.41	.47	3.33	.57	.50	<i>p</i> > .05	-.25	.41

3. Affective domain (interest in learning science)

Table 3 presents the results of the pretest and posttest regarding interest in learning science. The mean score for attitude toward science on the pretest was 2.69 and that on the posttest was 3.89.

Table 3 Results of Pretest and Posttest regarding Interest in Learning Science among Vocational School Students in the Power Operation Course (*N* = 20)

Interest in learning science	Pretest (n = 20)		Posttest (n=20)		t	p	95%CI	
	M	SD	M	SD			LL	UL
Attitude toward science	2.69	.434	3.89	.55	-6.39***	p < .001	-1.59	-.81
Learning atmosphere	3.20	.260	4.05	.67	-6.36***	p < .001	-1.13	-.57
Difficulty of learning	3.22	.282	2.28	.62	5.68***	p < .001	.59	1.29
Commitment to learning	3.34	.284	3.94	.63	-4.51***	p < .001	-.88	-.32
Participation in learning	3.59	1.27	3.76	.58	-.49	p > .05	-.90	.56

4. Skills domain

Table 4 presents the pretest and posttest results related to students’ skills. The data reveal a significant improvement between the pretest (M = 26.24) and posttest (M = 94.53). The results of a t-test examining whether inquiry-based instruction improved students’ skills showed a significant change (t=-84.82, p < .001) between the pre- and posttests, indicating that inquiry-based instruction had a significantly positively effect on students’ skills.

Table 4 Results of Skills Pretest and Posttest among Vocational School Students in the Power Operation Course (N = 20)

	Pretest (n = 20)		Posttest (n = 20)		t	p	95%CI	
	M	SD	M	SD			LL	UL
Skills examination	26.24	3.59	94.53	2.40	-84.82***	p < .001	-69.97	-66.60

DISCUSSION

This study confirmed that inquiry-based instruction can significantly improve students’ cognitive ability and skills. In addition to the direct influence of inquiry-based instruction, we found improvement related to the use of a two-way specification table by teaching staff, who employed this tool to develop questions for the basic ability examination. Thus, assisting instructors with their pedagogical approaches and assessment techniques can indirectly lead to significant improvements in student performance.

The comparison of pre-test and posttest scores for self-efficacy, learning-goal orientation, and performance-goal orientation reflected considerable enhancement of students’ motivation to learn science. The data also showed that students experiencing difficulty with learning could be helped by inquiry-based instruction. Moreover, given that self-efficacy is strongly associated with self-confidence related to learning science, it is likely that inquiry-based instruction encourages students to adopt different approaches in the service of developing a better understanding of the subject, helps students familiarize themselves with ongoing experiments and areas of inquiry, and enables them to obtain better scores on examinations.

In terms of “value orientation,” this study found no change in students “value orientation” toward science, a construct related to students’ appreciation of the value of science learning. This may have been caused by students’ lack of experience with inquiry-based instruction and the longstanding tendency of vocational education to focus only on skills rather than on the process of thinking. However, students in the Power Operation course changed significantly with regard to their interest in learning science, as manifested by scores for attitudes toward science,

learning atmosphere, commitment to learning, and difficulty with learning. These data reflect increased interest in and decreased difficulty with learning science among students taking the Power Operation course.

We also found no significant differences in learning participation, which is consistent with the results reported by Zangori, Forbes, and Biggers (2012). This may be attributed to the relatively short duration of the teaching period in this study. Additionally, students in this study were in the initial stage of learning. Moreover, the teaching environment in Taiwan may emphasize a linear conception of progress and the use of examinations to advance in school. This creates a culture in which students must focus on receiving what is taught by the faculty at the expense of asking questions. All of these factors may lead to significantly less participation in learning.

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Marginal Returns to Education For Teachers

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ABSTRACT

The objective of this paper is to estimate a private rate of returns to education for teachers in Malaysia. Using information from teachers' survey for more than 5000 respondents, we deploy the Mincer's wage equation using an ordinary least square (OLS) as a homogenous return model. The finding indicates that the private rate of returns to schooling for an additional year of schooling is about 5 percent. This result is lower compared to the previous estimation for Malaysia. Furthermore, the marginal returns shown that the different levels of teachers training obtained the different returns. Those who completed teachers training with higher credential are likely to enjoy a higher return. This result is reflecting a sheepskin effect in a labour market. However, a significantly wage different by level of academic attainments is a result from government policy to raise teachers' income and skill by increasing their level of academic qualification.

Keywords: returns to education, human capital, schooling

INTRODUCTION

A few studies of returns to schooling in Malaysia show inconsistent results. Hoerr (1977), Mazumdar (1981) and Lee (1980) concluded that the earnings variation in human capital theory is largely explained by education. Chapman and Harding (1985), Blau (1986), Gallup (1997), Chung (2004) and Zainizam (2013) were estimated the rate of returns to education. However, the results of their studies were inconsistent due to methodology and sample was different. The limited data and resources, and to some extent the choice of schooling and earnings variables, also give a different coefficients of returns to schooling. Furthermore, previous data and analysis on returns to schooling were hampered by relatively few observations and other data inadequacies. Therefore, this paper offers an estimate based on teachers survey data. It will provide new evidence of returns to schooling using the latest data set - in particular, to estimate the average return for an additional year of schooling for teachers. In Malaysia, the education system consists of pre-school, primary school, secondary school and higher learning institutions. Primary education starts at seven and ends within six years. All students are automatically promoted to secondary school after completion of six years in primary school. The normal duration of secondary schooling is five years but it is divided into two levels. Level one refers to Form 1, 2 and 3 (Lower Secondary) and level two refers to Forms 4 and 5 (Upper Secondary). The Upper Secondary Education offers choices to students to fulfil their needs, skills and interests in career development, including education sector after completed upper secondary school. Those who are completed this level of schooling attainment with a high achievement have the opportunity to apply as teacher's training at the higher learning institutions. Meanwhile, post-secondary education offers school leavers or students the opportunity to continue their studies after completing five years of secondary education. Form Six education is a continuation of the five years of academic schooling that helps students to prepare themselves to qualify to go to the university. It takes two years to complete the post-secondary education either in the science or the arts stream before the student can sit for the Higher School Certificate (HCE), conducted by the Malaysian Examination Council. Meanwhile, higher education offers various types of courses ranging between four to six years to complete. At this point, for those interested in teaching carrier could do so by applying post diploma in education. Therefore, schooling attainment, academic qualification and training among teachers are different which is become our motivation to offer estimation a marginal return to teachers.

METHOD

The empirical analysis of this study uses the standard human capital earnings function to estimate the rate of return to teachers in Malaysia. According to Card (2001), this path-breaking work was extensively used by economists as an econometric approach to estimate the rate of return to investment in education. The model is;

$$\ln W_i = \alpha + \beta_1 S_i + \lambda_1 Exp_i + \lambda_2 Exp_i^2 + \varepsilon_i \quad (1)$$

where $\ln W_i$ is log earnings, S_i is years of schooling, Exp_i is the potential experience of individual i , and ε_i is well-behaved error term. Due to the absence of the completed data on experience, Mincer (1974) proposed the “potential experience”, i.e. the number of years individual A could have worked after completing schooling and then, assuming that he/she starts schooling at 7 years old and begins working immediately after S_i of schooling, hence Exp_i is equal to $A - S - 7$ (Age – Years of Schooling – 7). Running the simple Ordinary Least Square (OLS) regression to the above equation, one can estimate the coefficient β_1 as the average of private rate of return to schooling (Weiss, 1995). The last term of the equation, Exp_i^2 represents the experience squared to capture a concavity of the observed earnings profile. The estimation of the parameters λ_1 and λ_2 will become positive and negative respectively.

The earnings variable in equation (1) makes use of the logarithm form because the distribution of log earnings is very close to a normal distribution, especially log hourly wages (Card 1999). In addition, it is preferable to use the log transformation based on the success of the standard (semi-logarithm) human capital earnings function (Willis 1986). For the purpose of this study, the dependent variable will use monthly earnings as reported by the survey. The standard wage equation can be used to estimate the average rate of returns to different levels of schooling by converting the continuous years of schooling (S) to dummy variables which represent the different levels of schooling. After fitting schooling dummies, the extended earning function will be;

$$\ln W_i = \alpha + \beta_1 CERT_i + \beta_2 DIP_i + \beta_3 DEG_i + \lambda_1 Exp_i + \lambda_2 Exp_i^2 + \varepsilon_i \tag{2}$$

Using the above equation, we can estimate the returns for each level of training. The parameters are derived from the formulae; β_1 , β_2 and β_3 are the parameters in our model.

RESULTS

This study is uses primary data collected from the teachers’ survey. The sample consists of 5672 teachers. The mean annually earnings are MYR43, 281.49. Meanwhile, the mean of schooling, certificate obtained, age and experience are 15.44, 2.97, 38.60, and 16.203 years respectively. The return to schooling in the homogenous return model is constant across individuals. The first empirical results were derived from the estimation using equation 1 as presented by Table 1. The average private rate of return for an additional year of schooling was 5.3 percent for overall for teachers. In other word, holding all other independent variables constant, an additional year of schooling is associated with a 5.3 percent increase in annually wages. Similarly, an additional year of experience is associated with a 3.7 percent increase in annually wages. With the exception of the dummy for gender (Male = 1), all parameters are significant at 0.05 levels or better. The results show the data are consistent with the basic human capital theory. Schooling and experience are positively correlated with earnings but experience squared is negatively correlated. The average return to schooling based on a homogenous return model for teachers is lower than the average return for Malaysia, which is 10.54 percent (Ramlee & Marinah, 2013). The private rate of returns for Asia as a whole in 2004 was 9.9 percent (Psacharopoulos and Patrinos, 2004). Nevertheless, it is low compared to the Asian Tigers, for example, Singapore with an average return of 13 percent (Psacharopoulos, 1994; Sakellariou, 2003).

Table 1: Private Rate of Returns to the Teachers, Mincer’s Model

Variables	Overall	Certificate	Diploma	Degree	Post Degree
Constant	9.310*** (.021)	9.563*** (.063)	9.140*** (.040)	9.629*** (.066)	9.343*** (.096)
Schooling	.053*** (.001)	.038*** (.002)	.058*** (.002)	.036*** (.004)	.050*** (.006)
Exp	.037*** (.001)	.031*** (.0016)	.047*** (.003)	.038*** (.003)	.036*** (.003)
Expsq	.000*** (.000)	.000*** (.000)	-.001*** (.000)	.000*** (.000)	.000 (.000)
Male = 1	-.008 (.006)	.018 (.012)	-.011 (.000)	-0.030** (.013)	.001 (.013)
Married = 1	.017* (.009)	.022 (.019)	.008 (.020)	.026* (.016)	.009 (.017)
Tenure = 1	-.0794** (.027)	-.017 (.012)	.008*** (.012)	.036 (.013)***	.024 (.013)*
R-squared	.544	0.346	.622	.598	.542
F	977.39	98.89	347.24	279.17	542.83
Observations	4983	1127	1271	1134	1375

Standard errors in parentheses.

*** Significant at 1 % level.

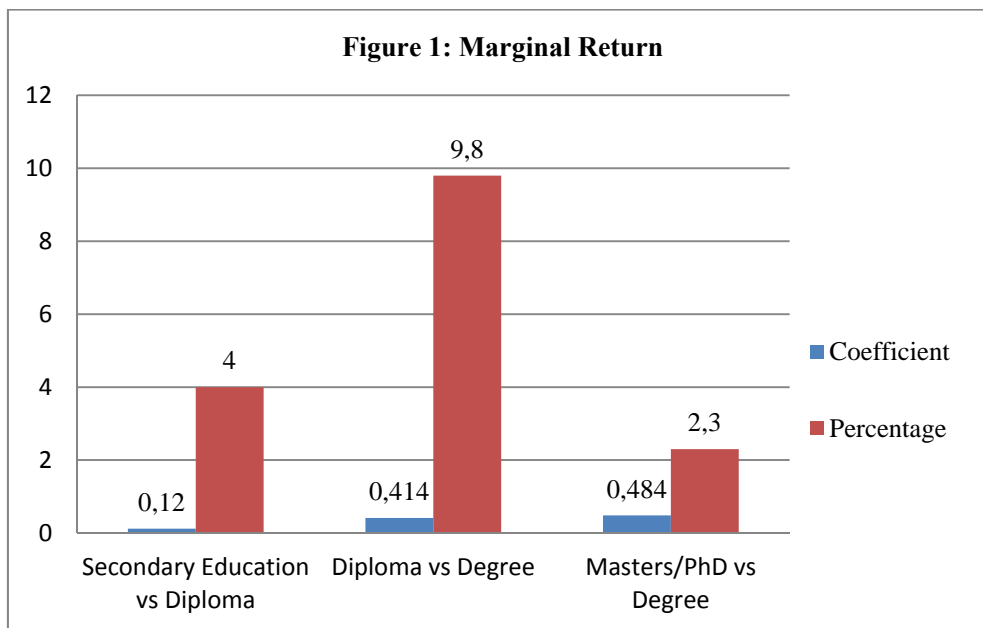
** Significant at 5 % level.

The study estimates the multiple treatment effect from the equation (2). The results show that nearly all education coefficients are statistically significant at the point of estimation of 0.01 levels, indicating that the particular education credentials’ variables are different from the estimates for the omitted variables (certificate). Table 2 shows that return to individuals’ trainings of those who had completed diploma level (as compared to those who had teaching certificate) increased to 0.120 percentage points. Similarly, at the higher level, returns for higher education were increased during the time of the surveys which made the earnings premium of around 0.4 percentage points as compared to the omitted educational dummy.

Table 2: Marginal Returns to Schooling

Variables	Coefficients	(Std Error)
Constant	9.805***	(.012)
Exp	.039***	(.001)
Expsq	.000***	(.000)
Male = 1	-.007	(.006)
Married = 1	.016	(.009)
Tenure = 1	.025***	(.006)
Diploma	.120***	(0.11)
Degree	.414***	(.009)
Master	.484***	(.015)
R-squared	.553	
F	759.322	
Observations	4913	

The credentials coefficients from Table 2 can be transformed to percentage returns for those undertaking different levels of educational training. Figure 1 shows the marginal gross of returns to years of schooling. The augmented Mincerian earnings function fitted well when using years of schooling dummies and other controlling variables. The reference variable was “secondary education”. All dummies for schooling are statistically significant different except for marital status and gender. Individuals with diploma level education had increasing marginal returns compared to those who had secondary education. The marginal gross returns to qualification for individuals who completed at this level were 4.0 percent. The marginal gross return for degree education to diploma education is increased by about 9.8 percent for an additional year of schooling. For those who completed master degree, additional returns of between 1.9 and 2.3 percent, compared to degree level, were received. For all levels of education, the highest returns were obtained by those who completed at degree level. The additional returns for those who completed at degree level compared to those who completed at diploma level are about 10 percent.



The results indicate that there are high and positive private returns to teachers in Malaysia, especially at higher levels of education. The findings support the previous studies (for example by Chung, 2003 & 2004; Ramlee & Marinah, 2013). Furthermore, our results showed that marginal gross returns to education at secondary education are low, consistent with the findings by Lee (1980), Lee & Sivanthiran (1992) and Chung (2003 & 2004). Meanwhile, the overall return to teachers is higher than those who are involved in manufacturing sector in Malaysia. Zainizam (2013) reported that the return for an additional year of schooling for manufacturing sector is about three percent, two percent lower than teachers’ return. The pattern of marginal gross private rate of returns to schooling provides a little evidence of the sheepskin effect in the Malaysian labour market, which is refers to the private rate of returns to education certificates rather than the accumulated years of schooling (Belman & Heywood (1997). It reflects the labour market recognizing qualification as a requirement in preference to years of schooling. Moreover, certificates could be being used as a screening device for the employer in the competitive labour market. Therefore, if this hypothesis is true, the best choice for the individual in terms of investment in education is to obtain a certificate rather than merely to complete more years of schooling. For example, those who completed their education at Form 5 (Year 11) will obtain the Malaysian Certificate of Education. However, those who completed 11 years of schooling (upper secondary) but did not obtain the Malaysian Certificate of Education (MCE), were forced to accept jobs with a lower qualification (for example, Lower Certificate of Education – with 9 years of schooling). Their returns will reflect this qualification. However, an investment in an extra year of schooling does not give any higher return. In fact, the finding reveals that the return could be decreased. In order to get higher returns, he/she should add one more year of schooling and obtained the next level of credential. With a higher qualification, i.e. Higher School of Certificate (HSC), the results showed that they may get more returns compared to those from the earlier stages of education.

CONCLUSION

The average private rate of return for an additional year of schooling for teachers in Malaysia was 5 percent. An additional year of experience work has increased earnings by 3 percent. The returns to qualification have shown an inclining trend which is the higher level of schooling enjoyed a higher return and was stable over time compared to the lower levels of schooling. To sum up, the findings of this study are as follows. Firstly, we found the average private rate of returns for teachers is half of the Malaysian average returns. Secondly, when the returns were estimated using qualifications (or years of schooling) the findings signify a non-linearity in return. The average returns to qualifications or years of schooling differed among individuals. Those who completed a certain level of schooling but did not obtain an additional qualification did not show the same returns as those who completed the same level of schooling and who secured a qualification (or certificate). If this was indeed a feature of the Malaysian labour market, it may partly explain why workers with the same years of schooling receive different returns; the evidence is consistent with credentials having been used as a screening device.

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Education at the University - in the Opinion of Students and Teachers (2008-2012)

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ABSTRACT

The paper refers to the role of teachers in education (upbringing) of students in two kinds of schools – the university and the higher vocational school. In 2008 we conducted research between students of The John Paul II Catholic University of Lublin and the High Vocational School in Biała Podlaska. In 2010 we undertook those problem at the same schools, but we investigated the teachers' opinions. Then we compared the students' opinions with the teachers' opinions. In general, the opinion of students and teachers are similar. But we found problems in pattern of teachers' behavior. Some of them (but not many) are little conscious of their role in educating the young, not very involved in their work, unprepared to classes, not punctual, unjust, and rude to their students. Then in 2012 we make deeper the research by asking students to write how they understand the perfection at the university.

Keywords: education, high school, university education, upbringing, authority of the teacher

INTRODUCTION

Upbringing (education) we call conscious, intentional and planned activities of educators (or its effect), which is intended to induce positive changes in personality and behavior of the pupil. In other words: we understand education as a help in development of a child or young person. Upbringing - at the same time - is possible thanks to authentic meeting of people (Nowak, 2000). Different educational systems in different ways define specific goals, tasks and methods of education (Kunowski, 2007). However, apart from these discussions, it is clear that the teacher usually acts through a number of known mechanisms of educational psychology, such as imitation, modeling, identification, interiorization of norms and values and role playing or giving meaning to situations and events (Przetacznik-Gierowska, 1998). In the pedagogy they are called direct and indirect methods of education (e.g. interaction through conversation, presenting personal patterns, organization of the educational environment or through the impact of group) (Łobocki, 2009). Upbringing takes place in different environments - especially the family and school (Łuczynski, 2011), also in high school. University teachers are people who can to the greatest extent create the university culture and influence personality and behavior of students (Le Cornu, 2010).

METHODES AND PROCEDURES

The question arises how university teachers can educate students at researched schools, and to what extent they actually do it. Our research was conducted in two schools (university and high school), both among students and employees, to answer these questions.

Diagnostic survey was conducted in two universities in April 2008 in order to obtain students' opinions. We managed to get a survey of 208 students (at the Catholic University of Lublin - from 107 people and at the State School in Biała Podlaska - 101 people). Among respondents there were mostly students of second and third year. The group consisted of 173 women and 35 men. The subjects were 107 full-time students and 101 part-time students. The questionnaire was prepared by the authors of the article. It included 29 open questions, closed questions (disjunctive and conjunctive), alternative questions and a Rating Scale.

Teachers were surveyed in 2010 almost the same questionnaire. They were employees of the same schools. Unfortunately, we managed to obtain only seventy-one properly completed questionnaires. Almost 82% came from KUL. In the study there participated women (54%) and men (46%). The teachers represented the social sciences (26%), legal sciences (23%), mathematical sciences (21%) and humanities (20%), but also science, philosophy and theology. The questionnaire for academic teachers was also prepared by authors and included 34 open questions, closed questions (disjunctive and conjunctive) alternative questions and a Rating Scale (Łuka & Truskolaska, 2010).

In 2012 we asked students to write any open work about the perfection at the university, because we wanted to make our research deeper. The topic of that work was: "how do you understand perfection at the university". The

51 written expressions of students were categorized and analyzed both in quantitative and qualitative way. The aim of the study was to answer the question: what is perfection, especially at the university, in the opinion of students of the Catholic University of Lublin. Statements of 51 students of pedagogy (II and IV year full-time) were collected to answer the research question. The statements were written completely arbitrary and had two parts. They provided the answer to the question, "What is your opinion on perfection, and especially what is perfection at the university?" The statements were collected in November 2012. The collected comments were categorized. Then the categories were grouped into four types: "honest fulfilling the obligations", "atmosphere at the university and meeting the needs", "material, organizational and didactical conditions" and "mission and reputation of the university." Subsequently the responses were counted. The result of calculations and conclusions arising from them are presented in forth section of the article.

THE RESULTS OF THE RESEARCH – STATEMENTS OF STUDENTS (2008) AND TEACHERS (2010) - COMPARISON

The students, in the vast majority, said that academics shape the culture of the university and affect its environment, mainly the youth. Professors interact primarily through their behavior, which is a role model for students, and especially by the attitude towards students, the ability to transfer knowledge, communication and the way of activities conducting, organization of cultural events and scientific circles. Several persons stated that the care for the university good name, religious attitude and even the appearance of the lecturers is important, too.

A very similar opinion is expressed by their academics. They added, that the realization of values is important in shaping the culture of high school, in particular the level of scientific work (e.g. the constant widening their knowledge), the method of conducting classes (e.g. opportunities for discussion, the relevant requirements), introducing students to the history and traditions of the university and the active way of representing the university to the outside, too.

Values preferred by academics - in the opinion of students - are primarily knowledge and religious values, but also social prestige, and (to a small extent) the material values, rarely - the hedonistic values. Teachers found that the values which they themselves consider to be the most important are successively: moral values (37%), knowledge (35%), social prestige (21%), the material values (15%), religious values (12%) and hedonistic values(1%). Interestingly, social prestige gained the high value, especially in comparison with religious values (especially in KUL). It seems that the respondents are aware of this deficiency, because in the next section they expressed the opinion that university staff should first of all realize the moral, social, intellectual and religious value. Students present a very similar opinion, but the majority considers that teachers should realize first of all intellectual values, and in the second place the moral and religious values.

Most of the young people expect from their teachers mainly appropriate attitude to students: justice and impartiality, honesty, respect, good manners, forbearance and tolerance, kindness, patience, openness and understanding (in the following order). Students also want their lecturers to be more involved in their work (creative, reliable), cooperate with students and conduct interesting and less monotonous activities.

Despite the awareness of these deficiencies, the vast majority of students (75%) believe their teacher as a scientific authority (the most students), both - moral and scientific authority or moral authority only (the smallest group of studied youth). Some students found that only some teachers deserve the name of authority, while others are completely not any authority. Students from the Catholic University of Lublin treat their professors as the authority more frequently than students from PSW (State High School). The full-time students treat professors this way more often than part-time students.

At the same time as much as 88% of teachers (including 91% of the KUL and 70% in the PSW) state that teachers have authority in the university environment. KUL staff believe that this is both moral and scientific authority (68%), while lecturers of PSW that, above all in the field of science (60%). Thus, it appears that teachers give themselves more authority than the young give them.

Surveyed students in the majority (62%) evaluate the behavior of teachers as good or very good, describing them as friendly, kind, cultural and worth following. But as much as 14% of students speak negatively about professors' behavior, writing that they are arrogant, "wrapped up in themselves and omniscient", treat the work as sad duty or a punishment, have bad classes (they are boring), reduce activities, discriminate some students.

At the same time 32% of students perceive the behavior of teachers as different. They underline in his remarks that everyone is different and this is difficult to evaluate general behavior of all teachers. They write for example: "the majority behaves very well, but there are exceptions which do not respect the students", "behavior is generally correct, although there were unacceptable incidents (e.g. teasing people from the village)". Worth thinking about is the student's statement about the professors: "There are two types – those we will never forget and the

others we would never want to be."

Most of the respondents perceive their professors as people who are: lenient, friendly, open and communicative, competent, intelligent and witty, able to pass on the knowledge, honest and fair, truthful, timely and cultural. A small part of the students defines their teachers as: unfair and unjust, uninvolved and bored, haughty, proud and unpunctual.

Lecturers more critically evaluate the behavior of their own and their colleagues. Half of professors (43% at KUL and 70% in the PSW) believes that the behavior of teachers in their schools is proper, good or very good. The second half (especially employees of KUL) evaluates critically the behavior of their colleagues, subordinates, superiors, and perhaps his own. Many lecturers criticize some colleagues, but in the same speech they stress reliability, hard work and involvement of others. Most often cited faults (which is also confirmed by the teachers answering the following question) are: not engaging in work, creating the appearance of activity, arrogance, disrespect for other people (staff and students). Knowledge, kindness, openness to the students, courtesy, conscientiousness, religiosity are usually mentioned among the advantages. Many people in their statements emphasize that there are "those good ones".

Students responded the question: "how scholars treat students?" They stated that in the class most lecturers treat them - friendly, as a subject and partner, in a demanding way but fair. On exams, students - in his mind - are treated fairly, but also often severely and with high requires, sometimes mildly and tolerantly, some professors try to direct, "and even talk and discuss with students". Interesting is the statement: "as a partner - a student passing an exam has the right - if he can properly argue - do not agree with the examiner." However, some of the teachers are not fair, and even act hostile, suspicious and degrading, they treat students as "idiots and fools." But after classes - teachers are mostly friendly, nice, polite, courteous, sometimes indifferent, or unavailable. Many students state that there is no contact with the teachers after classes.

Treating students in class is evaluated by the teachers themselves most often (69%) as good, respectful, professional, friendly. A large part of interviewed teachers stresses that they want to transfer knowledge in such a way that encourages students to learn. We can also meet the voices of criticism, but they are a minority. Treating students in examinations is described by the vast majority to be fair. Some people think of them as too lenient, and some as severe. There are also responses that point out the lack of respect for students during exams, but these are the voices of individuals. While, there is often no contact with students outside the classroom - in the opinion of the employees themselves. However, if the meetings take place, the majority of respondents stated that usually they are characterized by culture, kindness and positive attitude.

Respondents evaluated teachers for several important features (on a scale of 0 to 5). Assessment was as follows (the first is the students' assessment, and the other – teachers'):

- honesty in 3.56 and 4.0,
- dutifulness - 3.70 and 3.95,
- truthfulness - 3.95 and 4.15,
- punctuality - 3.23 and 3.40,
- justice - 3.02 and 3.95,
- involvement in work - 3.84 and 3.75 and
- manners - 4.30 and 3.95.

Some people have pointed out rightly that you can not judge all teachers in general, but as individuals. Self assessment of lecturers is usually slightly higher than the assessment of lecturers made by students. KUL teacher evaluation is somewhat higher than PSW or very similar and oscillates around a position 4. In both schools the weakest point of employees is punctuality, and - in the student evaluation - also justice. The greatest differences occurred between the universities in the field of personal culture, which is far below assessed in PSW, and better in KUL. A feature of teachers (of PSW) concerning the involvement in work achieved extremely low values – 2.66! (Knight, 2002).

Students also assessed how teachers communicate with them. They found that teachers turn to them most frequently in everyday language, simple, understandable and - polite. Often this language is referred to as scientific and specialized. In this case, the majority concluded that teachers explain confusing terms and expressions. Sometimes teachers also use the language of the youth. Individuals stated that teachers turn to students "not always as they should", "it happened that the teacher insulted the students." In general - 3% of students believe that all teachers can communicate in a communicative way, 65% - the majority of professors, and 32% - that only a few

professors are communicative.

Academics believe that the language, they turn to the students, is correct (grammar), a scientific but understandable, characteristic of an area and cultural. Only one person drew attention to the emerging (rare) grammatical errors, and another person to the appearance (very rarely) of profanities. Most teachers (76%, including 90% of the KUL and 62% of the PSW) - like the students - estimate that they communicate with the youth in a communicative way.

Respected norms of behavior are also educational patterns for the younger generation. The vast majority (88%) of the students indicated that the specific standards of behavior were applied at their schools. Most frequently they emphasize the need to respect the general principles of good manners and respect for both - teachers and students. In addition, 6% of students emphasizes the importance of appropriate dress, the prohibition of vulgarisms, a few people mention the prohibition of smoking in college. The necessity to be dutiful, involved in work and punctual. is also underlined. Characteristic is the fact that students of KUL connect norms of behavior with religious values, which is not stressed by the respondents of the PSW.

Opinions of teachers on specific standards of behavior were surprisingly divergent at the Catholic University and PSW. Lecturers from the Catholic University in the 84% reported that such standards were applied, and from the PSW - only in 30%! Successively: the moral, cultural and religious standards were cited most frequently. Some people gave concrete examples: respect for others, neat clothes and cultural expression, fairness at work.

The prevailing customs and traditions are also an important element of education. The vast majority of students (83%) stated that certain habits or rituals were cultivated at their schools. Traditions associated with the inauguration of the new academic year, an oath, initiation ceremonies, Juvenal, public open days, "rector days" and "an academic quarter" are mentioned most often. Catholic University students in large part (60%) stressed the habit of pray in the classroom, participation in Holy Mass, the celebration of the anniversary of the death of John Paul II - the latter was also recognized by students of PSW. Students in 44% considered that these practices were necessary, useful, important for a sense of academic community, supported the culture, traditions and create the atmosphere of the school. One of the students noted that the traditions "testify to the fact that studying is something important in our lives".

The surveyed teachers in 71% (small differences in favor of the university) recognized that the universities held formal and informal traditions. The lecturers mentioned them more than students, for example: matriculation, "Kulturalia" ("Days of Culture"), Christmas meetings, Lent and Advent recollections, preaching in a university church, prayer vigils, "Days of Pedagogues", public lectures, conferences, academic choir performances, St. Andrew party. "Academic quarter", "a zero exam", a slightly shorter first classes of the year are cited as less formal traditions. The surveyed teachers assessed cultivated traditions very positively and described them as needed, nice, integrating a community and creating school's climate. There was no critical voices at them, and only three neutral opinions. Overall, it seems that teachers are a bit more attached to tradition cultivated in the college than students. A lot of old and some newer customs are cultivated at the university. Whereas in the PSW respondents mentioned only a few basic traditions (first above mentioned).

The next question concerned the participation of teachers in everyday university life, especially their social activities. When asked if the students turn to them for help, 97% of respondents answered in the affirmative way. However, only 27% said that they were the tutors of any student group or organization – the most frequently – the tutor of one class of students or a scientific circle. Only 47% lecturers of KUL committed to the social life of the university (usually through voluntary participation in meetings or by helping people in need). However, these results strongly differ from the responses at the PSW - where only 15% of respondents declare their interest in the college social life!

The student statements confirm only to some degree the teachers' opinions. A large part of the youth (71%) know whom they may ask for help when they want to solve any problem. Class tutors were indicated by 30% of young people, staff of dean's office - by 23%, the university authorities - by 21% of the interviewed students. Other academics (in some cases called by their name) and students' government were mentioned much less frequently. In addition, 64% of respondents know students' organizations operating at their universities, but only 11% of students knows who from academics is their tutor. It seems that - in the minds of students - the teachers are much less involved in varied assistance to students than the teachers think of themselves.

Students in the 67% admitted that teachers created a positive atmosphere on campus, usually through a positive attitude to students, smile, nice behavior and conversation. However, only 14% of the students appreciate a sense of humor of their teachers. At the same time a large group of young people (18%) does not see the positive role of teachers in shaping their school climate. Slightly fewer teachers than students (58%, but up 95% from KUL and 23% from the PSW) said that lecturers create a positive atmosphere at the university. Appropriate attitude, especially

openness to students, kindness, understanding and respect for them is mentioned first of all among the ways of building this climate (Petegem, Aeltermann, Keer, & Rosseel, 2008).

Strengthening motivation to learn is also an important part of education at the university. Many students (68%) say that teachers motivate them to gain extra (additional) knowledge. Most do it through encouragement to become familiar with additional literature, to promote participation in scientific circles, participation in scientific conferences. It should be noted that most of these proposals are indicated mainly by full-time students of KUL, other groups of examined students less frequently mentioned such action.

According to the teachers, a bit more, because 80% of the lecturers (in KUL - 91% and 69% in the PSW) encourage students to gain extra knowledge. The most frequently mentioned methods are: giving additional literature, encouraging to participate in conferences, seminars and open lectures or using the indicated websites, and also showing the benefits that can be achieved by such action in the future, such as on the labor market.

According to the most students, common attitudes of the young, shaped by the lecturers, are: dutifulness, conscientiousness, orderliness, respect for knowledge, commitment and activity. However, in several statements (4%) there appeared negative signals - a statement on the transfer of the idea of morality in words, not deeds, showing indifference or boredom.

Teachers the most often list the honesty, truthfulness, responsibility, sensitivity, reliability, conscientiousness, diligence. So it seems that lecturers - in their own opinion - attach greater importance to moral values. And the students think that their teachers formed mainly work-related attitudes, particularly connected with intellectual work.

Young people in the majority (72%) believe that the university helps in shaping the personality of its students. Most frequently it happens through the gained knowledge, meeting new people, new experiences and through developing interests. It is noteworthy that only 1.5% of the respondents points out that they meet with their teachers as the authorities. The university teachers - also in 72% (but up 90% in KUL and only 54% in the PSW) state that the university helps in shaping the personality of students. Most frequently, according to the teachers, this is achieved by their own example, behavior, setting and the enforcement of requirements, pointing to the positive role models, emphasizing the importance of proper moral attitude, discussion in class, but also by a wide range of activities which develop students' interest. It seems that the teachers stress rather their intentional influence, and students - indirect impacts of the whole environment.

THE RESULTS OF THE RESEARCH – OPEN WRITTEN WORKS OF STUDENTS (2012)

Our research from 2012 shows that the students understand the term of perfection as a goal-oriented action, and the goal of the action is good. At the same time, the subjects - who contribute to create academic community - point to the need to strive for excellence at the university. Our students point to four key elements that development the perfection at the university: the conscientious fulfillment of obligations, appropriate atmosphere, suitable conditions for studying (material, organizational and personnel) and taking care about reputation of the university.

Table 1. Categories which are synonymous with perfection at the university - in the opinion of students – summary

No.	Description	Number of choices	
		N	
1.	Good fulfilling the duties	91	1
2.	Atmosphere and meeting needs	79	6
3.	Material, organizational and personnel conditions	42	9
4.	Mission and reputation of the university	8	

They understand the conscientious fulfillment of obligations as: by lecturers - skillful transfer of knowledge, a high level of education, improving teaching methods, developing the students' interests and motivating to work,

putting proper requirements, individual attention of lecturer to students, by students - preparation for classes and exams, gaining knowledge necessary for living and working, improvement and self-realization.

The students understand the appropriate atmosphere as: good interpersonal relationships, respect for others, honesty, caring for the welfare of students and staff, justice, fairness, openness, understanding the needs and difficult situations, support for students, good communication between staff and students, helping people from outside the university e.g. as volunteer, students' help for the university e.g. the organization of conferences.

The students emphasize necessity of engaging both students and lecturers in good job at the university. The opinions expressed in the study are congruent with the approach of Father Janusz Tarnowski (1992), very known Polish pedagogue. He emphasizes the need of continuous improvement of educators and teachers. Their examples attract youth, they become personal model for young people. Youth is involved by the example of lecturers and want to be better and better. (Łuka & Truskolaska 2012).

These results are consistent with the research results from 2008 and 2010, carried out by the authors. They indicate what areas are most important in shaping the culture of higher education and striving for excellence at the university - in the opinion of our students and lecturers.

CONCLUSIONS

The performed studies tend to a few remarks:

- the most statements of employees seem to be consistent with the statements of students, there were not large discrepancies, which may indicate the reliability of those statements;
- the statements of the students, are surprisingly similar in both schools, which represent the university and higher vocational school, while the opinions of KUL and PSW staff are often quite divergent;
- the teachers evaluate themselves slightly more positively, the students are generally more critical - but not in all aspects of the assessment;
- the both groups of respondents indicated that the realization of values in everyday life through behavior towards other people is one of the key elements shaping the education at the university;
- opinions of both groups - lecturers and students suggest perceptions of teachers as a very important group in higher education and directly affecting the students; most teachers deepen knowledge and also help to shape a friendly atmosphere and provide positive patterns of behavior; at the same time the respondents consider the contribution of the university as an important aspect in shaping attitudes and personalities of students;
- statements of employees (in substantive and formal aspect) also testify to the poorer culture of higher vocational school in comparison with the university, e.g.: fewer mentioned traditions, a few statements that the school has no standards of behaviour, low evaluation of personal culture and commitment of the lecturers;
- the disclosure of critical students and teachers voices is valuable - their dissemination (through publication) can improve certain aspects of school functioning, even at the individual level - so it has practical connotation; students think that teachers should, among others: prepare more interesting lessons, be more involved in the job and fair to students, in all cases, they should turn in a cultural way to the students and come to class on time.

We can cite the anonymous voice from the survey as a short summation of the research: *"Contrary to the opinion of many people, the essential role of the university teacher is not just 'cultivate' science at a high level, but also set a good example to students and do good activities (research and teaching mission) - both are very closely related, and even the best scientist can not be a good academic teacher, if you neglect lectures or ignore educational mission."*

It is obvious that it is difficult to make authorized generalizations because of too few responses of lecturers, but you can treat the discussed results as a contribution to further and more detailed research which we conducted partly in 2012 between of students of CUL in Poland. We wanted to lead further research in Turkey at Baskent University in December 2013 and in Italy in LUMSA University in April 2014.

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