

## Journal of Advocacy, **Research and Education**

ISSN 2410-4981. E-ISSN 2508-1055

2016. Vol.(7). Is. 3. Issued 3 times a year Has been issued since 2014.

#### **EDITORIAL STAFF**

Jacob Owusu Sarfo - KAD International, Ghana (Editor in Chief)

Cherkasov Aleksandr - International Network Center for Fundamental and Applied Research, Russian Federation (Deputy Editor-in-Chief)

Josephine Cudjoe – KAD International, Ghana (Member)

Michael Okyere Asante – KAD International, Ghana (Member)

Michael Asiedu – KAD International, Ghana (Member)

Solomon Kofi Amoah – KAD International, Ghana (Member)

Linda Ama Owusuaa – KAD International, Ghana (Member)

Anakwah Nkansah – KAD International, Ghana (Member)

Daniel Adjei – KAD International, Ghana (Member)

Nicholas Asiedu – KAD International, Ghana (Member)

Kenneth Amoah - Binfoh - SRM University, India (Member)

Henry Adusei - KAD International, Ghana (Member)

Isaac Oppong Bamfo - Ghana Technology University College, Ghana (Member)

Richard Appiah – University of Ghana, Ghana (Member)

Stella Ofori - Higher School of Economics, Russian Federation (Member)

#### EDITORIAL BOARD

Syeda Seemeen – Human Relations Institute & Clinics, Dubai, United Arab Emirates

**Degtyarev Sergey** – Sumy State University, Ukraine **Dogonadze Shota** – Georgian Technical University, Georgia

Egan Victor - Culture Bridge Australia Consulting (CBAC), Perth, Western Australia

Kojo Oppong Yeboah Gyabaah – Associates for Change, Accra, Ghana

Krinko Evgeny - Institute of Social and Economic Research of the Southern Scientific Center of the Russian Academy of Sciences, Russian Federation

Melanie C. Schlatter - Well Woman Clinic, Dubai, United Arab Emirates

**Sarfo Isaac Acheampong** – Koforidua Polytechnic, Eastern Region, Ghana **Shihabuddeen Ismail TM** – Yenepoya Medical College, Yenepoya University, Mangalore, India

Journal is indexed by: Journal Index (USA), Journals Impact Factor (JIF), MIAR - Information Matrix for the Analysis of Journals (Spain), Open Academic Journals Index (Russian Federation)

All manuscripts are peer reviewed by experts in the respective field. Authors of the manuscripts bear responsibility for their content, credibility and reliability.

Editorial board doesn't expect the manuscripts' authors to always agree with its opinion.

Postal Address: P. O. Box FW 22, Effiduase-

Koforidua, Eastern Region, Ghana

Passed for printing 23.12.16.

Format 21 × 29,7/4.

Website: http://kadint.net/our-journal.html

E-mail: sarfojo@therapist.net

Headset Georgia.

Founder and Editor: KAD International

Order № 7.

## CONTENTS

## **Articles and statements**

| Post-recruitment Issues Regarding Clinical Psychologists in Ghana: the Elephant in the Room?   |     |
|--|-----|
| Emmanuel Dziwornu, Yvonne Otubea Otchere, Eric Howusu-Kumi   | 125 |
| Educating Students with Disabilities in Inclusive Schools:<br>Results from Two Schools in Tanzania   |     |
| Joseph Reginard Milinga  | 134 |
| Copyright or Right-To-Copy? Towards the Proper Between Freedom of Expression and Copyright in Cyberspace                                     | _   |
| Irina V. Shugurova, Mark V. Shugurov   | 148 |
| Modern Textbooks and Prospects for Innovative Technologies:  Effects on Teaching Foreign Languages in Ukraine Olha Osova, Violetta Panchenko | 158 |
| Cloud Services in Educational Settings: A Must for Future Nursing Training Oksana Zhernovnykova, Nataliya Yuhno                              | 169 |
| Professional Readiness of Teachers to Use Computer Visualization Tools:<br>A Crucial Drive   |     |
| Elena V. Semenikhina, Artem A. Yurchenko   | 174 |
| Professionally-Oriented Communication Styles of Social Pedagogues: A Review Tetiana Savchenko  | 179 |



Copyright © 2016 by KAD International All rights reserved.
Published in the Ghana

http://kadint.net/our-journal.html

RESEARCH ARTICLE



#### Articles and statements

## Post-recruitment Issues Regarding Clinical Psychologists in Ghana: the Elephant in the Room?

Emmanuel Dziwornu a,\*, Yvonne Otubea Otchere b, Eric Howusu-Kumi c

- <sup>a</sup> University of Ghana, Ghana
- <sup>b</sup> Lancaster University, Ghana
- <sup>c</sup>The Trust Hospital, Ghana

<u>Paper Review Summary:</u> Received: 2016, October 20

Received in revised form: 2016, November 19

Acceptance: 2016, November 22

## **Abstract**

Psychology, though having a relatively long history in Ghana is still at its budding stage. Clinical psychologists in Ghana began to be recruited into the health sector following the passage of Act 587 in 2013. After the Ministry of Health began to formally recruit clinical psychologists, majority of regions in Ghana can boast of a psychologist. Notwithstanding this initiative, there are some challenges that need to be addressed in order to enhance the practice of clinical psychologists in the health sector. Challenges discussed in this paper include; administrative, institutional and qualification issues. These issues, though offered little attention currently, affect the overall psychological practice and the quality of life of the general population.

Keywords: Clinical Psychology, Ghana, Health Sector, Post-Recruitment Issues, Practice.

#### Introduction

Clinical psychology is the branch of psychology that is very much associated with health in terms of assessment, diagnosis and treatment (Plante, 2005). The field of clinical psychology is comprehensive and systematic. This creates the opportunity for an 'all-inclusive' or holistic model for the health sector so as to cater for health conditions that are typically lifestyle and psychologically based (The American Psychological Association [APA], 2000). Illness and disease perceptions have largely been influenced by a relativist approach that insists on a lifestyle dimensions, cultural beliefs than a biomedical basis to disease control and prevention in present day Ghana (Sarfo, & Ofori, 2016). Consequently, this creates the need for psychologists, especially clinical and health psychologists to bring their expertise into the field of health for a better and rigorous management at all levels in Ghana (Atefoe, & Nuworza, 2015).

-

E-mail addresses: emmanuel.dziwornu@yahoo.com (E. Dziwornu), yvonneotubea@gmail.com (Y.O. Otchere), erichowusukumi@yahoo.com (E. Howusu-Kumi)

<sup>\*</sup> Corresponding author

Health as defined by the World Health Organization [WHO] (1948) is explicit in terms of its comprehensiveness and not simply the "absence of disease or infirmity". To this end, the biopsychosocial approach to health is widely used, and both been endorsed and adopted by the WHO (WHO, 2002). This climaxed the imminent urgency for the need of clinical psychological practitioners in Ghana. Accordingly, the thrust of the matter was the final inculcation of the first batch of clinical psychology practitioners into mainstream health care service.

Undoubtedly, the concern about psychology in Ghana and Africa as a whole is growing not only among psychologists but among the populace who stand to benefit from psychological services. In Ghana, one of the sectors that witnesses obvious benefits from the discipline of psychology is the health sector. Long before now, clinical psychology was introduced into Ghana and West African by Professor S. A. Danquah at the Department of Psychology, University of Ghana, Legon (Asante, & Oppong, 2012; Danquah, 1982). This commenced both the health benefits of psychology and a revolution of the appreciation of the psychological dimensions to diseases in Ghana. Nonetheless, it was until 2013 that Ghana's Ministry of Health began to formally recruit clinical psychologists, in accordance with Act 857 (Health Professionals Regulatory Bodies Act, 2013).

In 2012, twenty-five (25) job positions were created in the Ministry of Health for clinical psychologists in Ghana (de-Graft Aikins, Ofori-Atta, Anum, & Dzokoto, 2014). It was with heavy relief that the profession and enlightened Ghanaians welcomed the decision of the government of Ghana to recruit the first batch of clinical psychologist in 2013. This is because the role of the clinical psychologist in health care delivery is not only about the efficiency but also cost effectiveness (Atefoe, & Nuworza, 2015; Romanow, & Marchildon, 2003; Sarfo, 2014). In addition, the pluralistic role of the clinical psychologists in the long term is also attributed to their ability to reduce extra costs that would have involved the recruitment, housing and payment for other health care specialists such as counsellors and health consultants. It is worthwhile to note that the conceptualization of health and illness as biopsychosocial is beneficial- scientific and practical. It will help individuals to reduce the risk of developing major medical problems, receive more effective treatment, and reduce the cost of healthcare when they seek treatment from an interdisciplinary team including psychologists (Wahass, 2005).

Comparatively, the health sector viewed through the lens of a thriving organization like any other 'living system'. With its input and output resources from an organizational behaviour perspective, it can be challenged with the biggest question of its readiness / preparedness to incorporate raw materials which are in the form of the readily available clinical psychologists into its structural systems for a best fit practice. Since the introduction of psychology in Ghana, there seems to be a lack of any appreciable form of public sector recruitment of clinical psychologists. A thorough review of anecdotal evidence seems to show that on individual basis, these professionals could secure jobs either with private organizations or even with the state in various capacities. In 2012 however, the Act was passed to enable the Government of Ghana to recruit clinical psychologists into the public health sector (Health Professionals Regulatory Bodies Act, 2013). Consequently, the first cohort of clinical psychologists was recruited in 2013. This recruitment attempted to place clinical psychologists in all regional hospitals. Therefore, for the first time in the history of Ghana, psychologists were introduced to Ghanaian health seekers in their mainstream health care centres in the ten regional capitals in Ghana.

## Brief history of clinical psychology in Ghana

Psychology in Ghana started in 1967 as an independent field, particularly taught as a higher education course at the University of Ghana (Asante, & Oppong, 2012). Along the line, graduate and doctoral programmes began to be offered. Currently, the programmes offered at the post graduate level in the University of Ghana Department of psychology include social psychology, industrial / organizational psychology and clinical psychology. Other universities in Ghana such as the University of Cape Coast and the University of Education, Winneba as well as other private universities run psychology courses at various levels.

Following after Ghana, Professor Danquah similarly extended the discipline of clinical psychology to other parts of West Africa like Nigeria. Currently, clinical psychology can be said to be playing a vibrant lead in the field of psychology in Ghana. In terms of qualification, one is required to possess at least, a master's degree in clinical psychology in order to be licensed as a

valid practitioner in the country. Specializations such as health and counselling psychology have also identified closely with the field of clinical psychology in Ghana. It is for this reason that the current recruitment requirements stipulate that one with a master's degree in clinical, health or counselling psychology could be accepted into the health sector. [It must however be noted that this prescription does not make clinical psychology, health psychology and counselling psychology analogous specialties].

Over the years, a number of clinical psychologists who graduate in Ghana have taken up several different roles within the Ghanaian public and private sectors. The graduate programme offered in clinical psychology includes a one year course work and a one-year practicum that takes place in selected health facilities in the country plus research. There is a year's internship after graduation which the graduate must undertake with a recognized clinical psychologist in a recognized institution [and must provide evidence of clinical supervision from the said licensed and practicing clinical psychologist]. Afterwards, there is the requirement to get licensed as a professional member with the Ghana Psychological Council [this was introduced in 2012 following the passage of the Act]. Currently, the University of Ghana and University of Cape Coast offer master's programme in clinical psychology and clinical health psychology respectively.

## The Role of clinical psychology in Health Care

Clinical psychology aims to reduce psychological distress and to enhance and promote psychological well-being. The clinical psychologist in the general hospital uses the skills: to relieve pain and reduce stress, to improve health with medical advice and to help patients and family members cope with chronic illness [family counselling]. The work of the clinical psychologist in these facilities may be independently executed, or as a part of a multidisciplinary team in a hospital setting. As mental health specialists, clinical psychologists would render service through mental health units and psychiatric hospitals. Also, clinical psychologists may function as behavioural health providers and help manage the behavioural dimensions of the physical health and illness. They provide clinical and health services to both inpatient and outpatient units including patients who visit the hospital on self-referral basis. The services of the clinical psychologist cut across several health conditions especially with the behavioural / life style conditions (Atefoe, & Nuworza, 2015).

Specifically, clinical psychologists help manage adult patients with chronic and or lifestyle diseases like lung diseases, heart diseases (Denollet, & Brutsaers, 2001; Atefoe, & Nuworza, 2015), cancer, HIV / AIDS and diabetes mellitus (Britneff, & Winkley, 2013; Sarfo, 2014). Most of these patients could be at high risk for psychological problems. The clinical psychologist also helps in the management of children with a variety of diseases and symptoms. Soons and Denollet (2009) have divided the children's condition into four primary groups: (a) children with psychosomatic disorders, headache, sleep problems, eating disorders, encopresis, enuresis and constipation; (b) children with chronic medical diseases, like chronic obstructive pulmonary disease [COPD], diabetes; (c) children with suspected developmental disorders; and (d) children with acquired brain damage. Again, the psychologist will refer adult patients with suspected or confirmed brain damage, like stroke, dementia, epilepsy, brain tumours for neuropsychological assessment and treatment. The clinical psychologist would work by helping the medical specialist in making differential diagnosis, investigating cognitive functioning (e.g. concentration and memory) and providing treatment to enhance functioning and general wellbeing (Soons, & Denollet, 2009).

In addition, clinical psychologist in the general hospitals in Ghana could help manage patients who present with somatic complaints (especially in the absence of a clear medical cause; e.g. functional headache, pain in the stomach or general bodily pains). The psychologist's intervention will help the patient gain insight into their condition and provide them with better and newer ways of coping. This becomes very important because it will save patients from moving from one medical facility to the next in an unending search for cure (Atefoe, & Nuworza, 2015). Practically, at the dental clinics patients could utilize the services of a psychologist to learn techniques [e.g. distractions, systematic desensitization and relaxation training) for reducing dental anxieties and fears and also help in the management of halitophobia using psychotherapeutic techniques] (Atefoe, & Nuworza, 2015).

The traditional function of the clinical psychologist to manage psychiatric patients with primary psychiatric conditions, like anxiety disorders, phobias, panic disorders, depression,

personality disorders, Posttraumatic Stress Disorder [PTSD] could be enhanced. Patients could be referred by psychiatrists where they are available, psychiatric nurses and other healthcare professionals. At the moment all regional and district general hospitals in Ghana have a psychiatric unit but not all of them have clinical psychologists and psychiatrists. Ghana had a little over 18 psychiatrists serving a population of over 25 million people before 2014 (Ministry of Health, 2013). The situation has created the much needed attention for high quality care to be delivered to the large number of individuals in need of mental health services, especially those found in rural areas (WHO, 2011).

The limited supply of mental health professionals has led to some clients / patients seeking only spiritual healing rather than conventional treatment by clinical psychologists in either the general hospital or the psychiatry facilities. With the availability of clinical psychologists in major hospitals, there may be a decrease in the heavy reliance on spiritual attributions as underlying causes of psychological disorders by the populace which seem to be the state of African traditional socialization (Ministry of Health, 2013; Sarfo, 2014).

Although the psychotherapeutic, assessment, and consulting services of clinical psychologists in health facilities in Ghana have traditionally been psychiatric in function, as the profession grew, psychological services began to be offered in other medical departments such as neurology, paediatrics, sickle cell, dental, oncology, burns and plastic surgery and gynaecology in hospitals in Ghana. This development occurred in not too many years ago although most countries have been have adopted the services of the clinical psychologist in these specialized medical settings for decades (Finger, Boller & Tyler, 2010; Herrmann-Lingen, 2011). From a practical perspective, experiences on the field required that clinical psychologists on internship at the Burns and Plastic Surgery Centre at the Korle-Bu Teaching Hospital in Ghana were required to undertake crisis management for disaster related psychopathology among victims and the psychological pain family members went through. Very common cases that were managed included PTSD, Acute Stress Disorder, somatization problems and body dysmorphic problems. Notably, roles of clinical psychologists in accident and emergency situations are expanding (Rosser, 2008). Some common direct services that the psychologist at the trauma centre provides to patients include psychological assessments [e.g., mental status examinations, suicidal risk assessment, danger to others evaluations], assistance in adjusting to critical medical conditions [e.g., psychoeducation regarding illness management], individual and family counselling regarding adjustment to medical conditions and life style changes, case consultation with primary care physicians regarding cultural and psychological aspects of various symptoms, and liaison with other medical specialties like psychiatry, social welfare, physical therapy (Kwok, Tori, & Rainer, 2013).

## Clinical psychology in the health sector: Challenges emerging Adaptation and adoption challenges

Since the introduction of the discipline of psychology in Ghana, government support has been low (Asante, & Oppong, 2012). This is evident in a host of delayed actions over the years. For example, the passage of the psychology act took several years to be passed, the reluctant journey to the eventual success in recruiting clinical psychologist into the health sector. There is the possibility of facilitating a process of training clinical psychologists in pharmacology so as to supplement the limited psychiatric personnel in the country. At the moment, the Kintampo Rural Health Training School in collaboration with the University of Winchester in the UK is training medical assistants to acquire degree in Clinical Psychiatry to enable them prescribe psychoactive medication (The Kintampo Project, 2010). This opportunity has not been extended to clinical psychologists in the country.

Another difficulty is the lack of appropriate recognition and acceptance of the field of clinical psychology by the health fraternity. Due to lack of knowledge or appreciation of the salient role of the clinical psychologists, most health professionals continually seem to disregard the eminent need of the clinical psychologists in diagnosing and managing diseases in the present health care system. They fail to refer patients, and practically can be seen to view the discipline as a threat to their profession. This is typically seen in the way some medical practitioners in particular tend to break bad news to patients when the services of a skilled professional clinical psychologist could be sought to do due diligence to such crisis emergencies.

Asante and Oppong (2012) noted that the theoretical undertone of psychology in Ghana as well as other Africa countries has been western in nature. This sadly affects the level of effectiveness of the interventions and practices that take place on the continent. What must be clear to the African continent and Ghanaians in particular is that even the western world identifies differences among themselves and adapts concepts to suit them. For instance, Danquah, Asare, and Naeeder (2014) advocated that just like other countries such as Germany, Russian, New Zealand, India, Thailand, Greece and Iran have done, Ghana should endeavour to train clinical psychologists in psychopharmacology in order to supplement for the fewer psychiatrists available in the country. In Germany for instance, psychologists who work in the general hospitals see 0.37% of all newly referred patients (Soons, 2006). Since the incorporation of clinical psychology into the public health sector in Ghana, a number of issues have evolved that need to be critically looked at in order to fine-tune the way forward. These issues can be grouped under structural and qualification challenges.

### Administrative challenges

It takes at least a master's degree to qualify to practice as a psychologist in Ghana. This means that all clinical psychologists recruited in Ghana must have at least a master's degree. It takes a total of seven years to complete such training. This is because one must have a four year first degree, a two year master's degree and a one year internship before licensing for practice (Asante, & Oppong, 2012). This is a considerable amount of effort to acquire such a specialized skill in order to function in the country. However, the placement of the clinical psychologist on the new pay structure [i.e. the single spine salary structure as practiced in Ghana] puts the psychologist at a disadvantage such that health professionals with similar qualifications are better placed than the clinical psychologist. The market premium for the clinical psychologist in the health sector is equally far below that of equivalent professions. In as much as the job is not just about the money, the money undeniably has motivational and subsistence value (Adusei, Sarfo, Manukure, & Cudjoe, 2016).

Apart from not receiving the due remuneration, clinical psychologists hired into the various health facilities barely had the appropriate office accommodation for practice. At least there was an ad-hoc arrangement to convert some spaces into offices for the newly recruited professionals in some facilities. However, appropriate arrangement in terms of office for consultation / therapy and assessment were non-existent. It is practically inappropriate for the clinical psychologist to share a consulting room with other health care providers since the psychologist handles rather very sensitive and confidential information from patients as compared to other professionals. Interaction with these professionals shows that even the ad-hoc arrangements were not conducive for engagement of the help of assistants or interns. This is simple because the assistants may not have space to work within. Meanwhile, these practicing clinical psychologists are to serve as prospective clinical supervisors to the upcoming clinical psychologists during their mandatory clinical internship program (Mayne, Norcross, & Sayette, 2000).

From our experiences in the field and in the health sector, it is not too clear which job description is being used within the health sector for the clinical psychologist. At best, the clinical psychologist knows their role in health care delivery. However, as an employee of a ministry / agency or a sector, job description must be clearly delineated by the Ministry of Health. This will define appraisal after a period of work. There is the need to consolidate the role of the psychologist in the Ghanaian health sector at all levels considering the occupational hazards that the job presents.

#### Institutional challenges

The inauguration of the board of the psychology council in Ghana, and as such the birth of the Ghana Psychological Council came without an office accommodation. It is therefore practically impossible to locate the council and make suggestions, inquiries and complains. Due to this 'quasi existence', the fall outs include poor coordination of council activities, inability to recruit and utilize staff, and the inability to implement regulations, protect and monitor members. In addition to the council, there is the Ghana Psychological Association which has been active for some time now. However, there seem to be little being done from this angle in terms of influencing policy and membership regulation. Ideally speaking, the association must be the mouth piece of the practitioners;

negotiating conditions of service, salaries, and sanctions. This would have promoted the interest of psychology and expose the populace to the great services psychology can offer in the country.

Until now, most private health insurances do not seem to understand the timeless and dire need of infusing mental health treatment into their insurance schemes. Thus, subscribers who seek psychological care are always made to pay in cash. This hinders the promotion of psychological and mental health and also disregarding the urgency of mental illness. The National Health Insurance Scheme [NHIS] which pays for mental health also pays the least claims for the services of a clinical psychologist. Eventually, psychological service that falls under specialist services ends up a less income generator for healthcare facilities. This makes these health facilities conclude that the service is not worth providing since not so many people are seen on daily basis. In private health facilities where the National Health Insurance and other insurances are not accepted for psychological services, clients tend to pay more for the service since these facilities treat clinical psychology as a specialized service which attracts higher charges. The phenomenon defeats the import of the definition of health by the World Health Organization [i.e. a state of complete physical, mental, and social well-being] (WHO, 1948). At the moment, ethical guidelines for professional psychological practice in Ghana are absent. At best, the profession uses the APA codes of ethics. However, it is important to note that some of the clauses in the APA codes of ethics are peculiar to the United States of America (Leach, & Harbin, 1997). Thus, there is the need for adaptation in order to suit the Ghanaian context. This places the onus on the council and the association to work towards the drafting of a code of ethics for psychological practice in Ghana.

## Qualification and practice challenges

Training required for qualification to practice as clinical psychologist is very crucial. As described above, it is mandatory for one to be duly qualified in order to be licensed to practice across the world. Though well accepted and understood, some individuals still attempt to practice as psychologists in various parts of the world without the required qualification.

One of such challenges in Ghana is that some individuals, either intentionally or unintentionally avoid the internship component of the training requirement for qualification in Ghana. This means that such people will only complete a course work and practicum. A strict regulation of appropriate internship and its completion seems non-available, thereby leaving this stage of the training to individual discretion.

Closely related to the above is the lack of supervision and evaluation of psychological centres in the country. A number of private practitioners have set up centres for consultation and psychotherapy. It is unclear how they received approval/licensure for private practice/operation. The law establishing the Ghana Psychological Council stipulates that thorough inspection must be conducted before approval is given for a psychological centre to be operated (Health Professionals Regulatory Bodies Act, 2013). Granted that some existed before the passage of the law, it is not clear whether they are being monitored and evaluated. When properly done, this will prevent the opportunity for unlicensed practitioners and thereby saving the image of the noble profession.

Another qualification challenges involves streamlining other specialists who also come in to be trained as clinical psychologists. This is contributing to unemployment because once other health or medical practitioners also acquire the specialization they tend to block the recruitment of psychologists who might have undergone rigorous training from the undergraduate levels to the masters and terminal degrees. The solution is streamlining the requirements for the admission of people into the clinical program. At best, certificate courses could be organized by stake holders such as GPA for medical or health practitioners who are interested in understanding the principles of clinical psychology.

Another disturbing challenge is the recruitment of counselling and health psychologists into the health sectors at the hospitals as a substitute for clinical psychologists. Indeed, the presence of health and counselling psychologists in the health sector will be an added advantage for the system; however, the role of the clinical psychologist in health care delivery differs from that of the counsellor and health psychologist. The counsellor or health psychologist could not be a substitute for clinical psychologist in health facilities.

Continuous professional development opportunities such as conferences, seminars and workshops constitute an invaluable component of the professional competence development process. With other professional groups in Ghana such as the Ghana Medical and Dental Council

[MDC], such activities are requirements for renewal of licenses. These professional groups accredit courses, conferences, seminars and workshops with allotted credits (MDC, 2016). These eventually culminate into the required credit needed for the renewal of licensure. This must be the model for clinical psychological practice in Ghana.

## **Implications**

## Implication for the health sector

The presence of these challenges has serious implications for the health sector in Ghana. The life of the citizenry in every country resides in their health sector. Arguably, many other sectors contribute to the overall life of people. However, at the forefront is what happens within the health sector. It is therefore important to carefully consider and monitor what goes on in this all important sector. An inability to curb these challenges could amount to endangering the lives of citizens. There will be the opportunity for unqualified individuals to try their unwarranted skills on the precious lives of people seeking health. This will result in deterioration of health and increase in related complications.

Supplying the wrong persons to the health sector will amount to paying money to the wrong people. Already, the government of Ghana spends huge sums on salaries of health workers. It is therefore necessary to recruit the right professionals who will be worth their salaries. It is therefore necessary for the health sector to diligently scrutinize individuals applying for employment into the health sector as clinical psychologists. The right people must be recruited in order not to render the health given to clients ineffective. This is likely to reduce the 'healer shopping' phenomenon and its lingering but devastating spiritual attributions of disease and illness perception.

## Implication for the growth of psychology in Ghana and Africa

If any profession should be careful in Ghana, it is the profession of psychology since the understanding of the actions of the profession is not well understood in the country. If the challenges are left unresolved, the unpopularity of psychology will deepen thereby rendering the profession ineffective in the country.

The output of the various professions counts significantly towards the premium placed on them. Using the wrong people will produce poor output. In effect, the market premium of the clinical psychologist in the Ghana health sector is bound to worsen than it stands. Recruiting a health psychologist instead of a clinical psychologist into a hospital in Ghana will fulfil the adage of 'putting a square peg in a round hole.

Psychology in Ghana needs to enforce the needed law in order to prevent unqualified individuals from practicing. There is the need for strong monitoring. The council and association must be up and doing and collaborate at various levels in order to achieve a common goal. Continuous development programmes must be regularly organized and made compulsory for licensing. There is the need for codes of ethics to guide the practice of clinical psychology in the country.

It is heart-warming to state that a great deal of institutional effort has made the presence of psychology in general to be felt in Ghana till date. For instance, the parliament of Ghana has commendably acted in the promotion of psychology in the country. Similarly, the ministry of health has also supported the call for psychology in the country. This is evident in the recruitment of clinical psychologists into the health sector and the inauguration of the Ghana Psychological Council Board. Regardless of these and the promising attitude so far, there still remains the need for some crucial issues to be addressed.

## Compliance with ethical standards

This paper is written with total cognizance of all ethical considerations. Efforts were made to avoid the disclosure of individuals at the helm of affair whatsoever. As much as possible, this paper only analyses the current state of affair of the practice of clinical psychology in the health sector in Ghana. Necessary documents were reviewed. This paper presents the views of the authors, though some discussions with our colleagues [anonymised] were also utilised.

## **Conflicts of interest statement**

The authors declare that they do not have any conflict of interest.

### **References**

Adusei, H., Sarfo, J. O., Manukure, P., & Cudjoe, J. (2016). "If I should stop teaching now, where will I go?" Turnover intentions among high school teachers in Ghana. *European Journal of Contemporary Education*, 17(3), 263-271.

American Psychiatric Association (APA) (2000). *Guidelines on hospital privileges for psychologists: credentialing and bylaws*. Washington: The American Psychological Association.

Asante, K. O., & Oppong, S. (2012). Psychology in Ghana. *Journal of Psychology in Africa*, 22(3), 473–478.

Atefoe, E. A., & Nuworza, K. (2015). Creating a space for clinical psychologists in healthcare system in Ghana: Is it necessary? *Journal of Advocacy, Research and Education*, *3*(2), 99-103.

Britneff, E., & Winkley, K. (2013). The role of psychological interventions for people with diabetes and mental health issues. *Journal of Diabetes Nursing*, 17, 305–310.

Danquah, S. A. (1982). The practice of clinical psychology in West Africa: The case of Ghana. *Journal of Behaviour Therapy and Experimental Psychiatry*, *13*, 5-13.

Danquah, S. A., Asare, M., & Naeeder, M. (2014). Why Ghanaian clinical psychologists also be trained to prescribe selected psychoactive medication. *Social Journal of Psychology*, 1(2), 1–2.

De-Graft Aikins, A. Ofori-Atta, A. L., Anum, A. & Dzokoto, V.A. (2014). Psychology in Ghana: A review of research and practice. In Agyei-Mensah, S., Ayee, J.A. & Oduro, A. (Eds.), *Changing perspectives on the social sciences in Ghana*. Dordrecht: Springer.

Denollet, J., & Brutsaers, D. L. (2001). Reducing emotional distress improves prognosis in coronary heart disease: 9-year mortality in a clinical trial of rehabilitation. *Circulation*, 104, 2018–2023.

Finger, S., Boller, F., & Tyler, K. L. (2010). *History of clinical neurology*. Edinburgh: Elsevier.

Health Professionals Regulatory Bodies Act (2013). Act 587. Accra

Herrmann-Lingen, C. (2011). Steps towards integrated psycho-somatic medicine—The example of psychocardiology. *Journal of Psychosomatic Research*, *70*(2), 111-115.

Kwok, W. O., Tori, C. D., & Rainer, T. H. (2013). New roles for psychologists in medical settings: Direct services in a Hong Kong Accident and Emergency Department. *Open Journal of Medical Psychology*, 2, 69-76.

Leach, M. M., & Harbin, J. J. (1997). Psychological ethics codes: A comparison of twenty-four countries. *International Journal of Psychology*, *32*(3), 181–192.

Mayne, T. J., Norcross, J. C., & Sayette, M. A. (2000). *Insider's guide to graduate programs in clinical and counseling psychology (2000-2001 ed.)*. New York: Guilford.

Medical and Dental Council (2016). *CPD Policy 2016*. Accra: Medical & Dental Council. Retrieved on 01-04-2016 from:mdcghana.org/revised-cpd-policy-2016/

Ministry of Health (2013). The mental health system in Ghana. Accra: Ministry of Health.

Plante, T. G. (2005). *Contemporary clinical psychology (2nd ed.)*. New Jersey: John Wiley & Sons, Inc.

Romanow, R. J., & Marchildon, G. P. (2003). Psychological services and the future of health care in Canada. *Canadian Psychology*, 44(4), 283–295.

Rosser, S. B. R. (2008). Working as a psychologist in the medical reserve corps: Providing emergency mental health relief services in Hurricanes Katrina and Rita. *Professional Psychology: Research and Practice*, *39*(1), 37-44.

Sarfo, J. O. (2014). Role of clinical neuropsychologists in the evaluation and management of diabetes mellitus in Ghana: A position statement. *Journal of Advocacy, Research and Education*, 1(1), 37-40.

Sarfo, J. O., & Ofori, P. K. (2016). Diabetes in West Africa: Using meta-ethnography to synthesise qualitative studies in Ghana, Cameroon and Nigeria. *European Journal of Medicine*, 12(2), 54-63.

Soons, P. H. G. M. (2006). Psychologen in de somatische gezondheidszorg. In A. A. Kapteijn, R. Buenderman, J. Dekker, & A. Vingerhoets (Eds.), *Handboek medische psychologie* (pp. 45–74). Bohm, Stafleu van Loghum: Houten.

Soons, P., & Denollet, J. (2009). Medical Psychology Services in Dutch General Hospitals: State of the Art Developments and Recommendations for the Future. *Journal of Clinical Psychology in Medical Settings*, *16*, 161–168.

The Kintampo Project (2010). *Curriculum for degree in clinical psychiatry - Developing mental health services in Ghana*. Hampshire, UK: Hampshire Partnership NHS Trust.

Wahass, S. H. (2005). The role of psychologists in health care delivery. *Journal of Family and Community Medicine*, 12(2), 63–70.

World Health Organization (1948). *Constitution of the World Health Organization*. Geneva: WHO.

World Health Organization (2002). The World health report. Geneva: WHO.

World Health Organization (2011). *WHO-Aims report on mental health system in Ghana*. Accra Office: WHO.



Copyright © 2016 by KAD International All rights reserved. Published in the Ghana

http://kadint.net/our-journal.html

RESEARCH ARTICLE



## **Educating Students with Disabilities in Inclusive Schools: Results from Two Schools in Tanzania**

Joseph Reginard Milinga a, \*

<sup>a</sup> Mkwawa University College of Education, Tanzania

Paper Review Summary:

Received: 2016, September 09

Received in revised form: 2016, November 13

Acceptance: 2016, November 15

#### **Abstract**

The quest for equal access, participation and success in education for persons with disabilities is paramount in today's global education context, and Tanzania is no exception. Since the ages of "denial" to "full inclusion", educating students with disabilities in inclusive classrooms has had been responded differently by teachers and students alike across countries. Confronted by different challenges in their education, students with disabilities are to devise mechanisms to excel in such restrictive learning environments. Informed by interpretive research traditions with 59 purposefully selected participants, this paper explores challenges that students with disabilities are faced with and coping strategies used by these students in their schooling in two inclusive secondary schools in Tanzania. The findings indicate that, students with disabilities are faced with challenges which are teacher and environment-related. Consequently, the students with disabilities use complaints, assistance seeking, self-initiatives, isolation and despair, and assertiveness to cope with the challenges. The study concludes that; educational stakeholders should work collaboratively in order to lessen the impact of the restrictive nature of learning environments for students with disabilities. The paper recommends on improved teacher preparation and continued professional development in order to cater for the learning needs of students with disabilities in inclusive schools.

**Keywords:** Coping Strategies, Disabilities, Inclusion, Inclusive Education, Tanzania.

### **Introduction**

Historically, education for people with disabilities has had gone through a number of landmarks as implicated in the global development of special education. This development, according to Terzi (2010), involved three main phases: segregation, integration and inclusion. The development of special education is suggestive that people with disabilities were at first not regarded for education, hence had no access to it as opposed to their counterparts without disabilities. The trend is also indicative that, with time people with disabilities were then educated

Corresponding author

E-mail addresses: regjoseph2002@gmail.com; milingajr@muce.ac.tz (J.R. Milinga)

in separate schools before later being integrated in regular schools, the construct that is closely related to the current practice of education globally acknowledged as ideal: inclusive education.

The move from ignoring to full inclusion of learners with disabilities in accessing education has had been influenced by various international statements and frameworks advocating for Education for All (EFA). EFA movement is concerned with ensuring access to (at least) basic education for all individuals (United Nations Education Science and Cultural Organization [UNESCO], 2001) irrespective of their polarized physical, cognitive, social and/or economic characteristics. EFA is grounded in human rights perspective, and that education plays a decisive role for individual and national development (United Nations International Children's Emergency Fund [UNICEF], 2011). Principally, the principles of anti-discrimination, equity, social justice and basic human rights advocate for children with disabilities to enjoy similar access to education as other children in inclusive schools (UNESCO, 1994).

Indeed, the commitment to EFA is envisaged in the second Millennium Development Goal [MDG] which concerns with the need for all children to complete their primary education by 2015 (Miles, & Singal, 2010). That is why EFA initiatives are premised on the need to equalize education access especially for the marginalized individuals such as those with disabilities. The United Nations Convention on the Rights of Persons with Disabilities of 2006, for example, calls for states to ensure equal access to education and lifelong learning of all people. In this regard, deployment of appropriate materials and instructional strategies in order to facilitate full participation of persons with disabilities in education and in society as a whole becomes a paramount aspect of inclusive education.

Tanzania, like many other developing countries, has positive responses to the EFA demands. These responses can be reflected in such documents as *Primary Education Development Plan* [2002-2006]; *Primary Education Development Programme* [2007 – 2011]; *The Primary Education Development Plan*; and the Secondary Education Development Plan [2004 – 2009]. Tanzania recognizes that having conducive learning environment for all learners is central to having all children access appropriate education in inclusive settings (United Republic of Tanzania [URT], 2008). This is because inclusive education approach is considered the best means of creating an education system that is responsive to learner diversity. Also, inclusive education is viewed as a means of ensuring that all learners have the best possible opportunities to learn in the same environment with their peers without disabilities irrespective of their unique educational needs and backgrounds. The justifications for the move towards inclusive schools, among others, are threefold:

"...the requirement for inclusive schools to educate all children together means that they have to develop ways of teaching that respond to individual differences and thus benefit all children; inclusive schools are able to change attitudes to difference by educating all children together and form the basis for a just and non-discriminatory society; and that it is likely to be less costly to establish and maintain schools which educate all children together than to set up a complex system of different types of school specializing in different groups of children" (UNESCO, 2001, p. 20).

### Theoretical Framework supporting the study

In viewing the practicality of inclusive education, it is worth revisiting the way disability has had been understood, focusing on the medical and social models of disabilities, the capability approach (CA), and the social cognitive theory (SCT). In the first place, the medical model, which is the traditional model of disability has focused on disabled people's impairments and has explained the difficulties they experience in their lives in terms of those impairments (Albert, 2004; Lang, 2001). This situation created unjust treatment to persons with disabilities. Consequently, they initiated movements demanding for the acknowledgement of their rights to full participation in society; this brought the social model of disability into being (UNESCO, 2001). This later model focuses on the role of social environment in excluding people with disabilities from full participation (Albert, 2004; Lang, 2001). In this model, a disability is viewed as a socially created construct that requires social change (Mitra, 2006); resulting from lack of consideration of individual needs of persons with disabilities when planning the environment to participate in different activities in society (Toboso, 2011). Essentially, inclusive education is informed by the social model of disability in understanding educational difficulties for students with special

educational needs (UNESCO, 2001). This entails that, children with disabilities may experience difficulties in the education system resulting from such factors as the kind of curriculum used, accessibility of school buildings, the kind of attitudes peers and teachers have about students with disabilities and teaching strategies used in teaching in such classrooms. This calls for appropriate accommodation practices in order to cater for the learning needs of all students in an inclusive classroom.

The CA as advocated by Amartya Sen and others like Martha Nussbaum is as well a useful framework for understanding disability in the context of special and inclusive education. It is "a broad normative framework for the evaluation and assessment of individual well-being and social arrangements, the design of policies, and proposals about social change in society" (Robeyns, 2005; p. 94). The core characteristic of the CA is its focus on what people are effectively able to do and to be; that is, on their capabilities (Robeyns, 2005). Sen argued that our evaluations and policies should focus on what people are able to do and be, on the quality of their life, and on removing obstacles in their lives so that they have more freedom to live the kind of life that, upon reflection, they have reason to value (Robeyns, 2005).

In the light of models in the study of disability, the CA provides a newer and promising perspective in understanding disability and special educational needs. In this perspective, "disability is seen as a specific aspect of human diversity emerging from the interlocking of individual with social, environmental and circumstantial factors" (Terzi, 2010; p. 106). This places persons who have disabilities at a disadvantageous position in their life. Consequently, this disadvantage restricts people's capabilities in carrying out different tasks freely (Terzi, 2010). Similarly, Bakhshi and Trani (n.d.) underscore that CA "stresses the interplay between characteristics of the individual and the social groups that he/she belongs to, as well as the institutional factors that may influence or even hinder his/her choices" (p. 6). This framework of thought, as Terzi (2010) contends, is meant to provide more innovative and helpful means for reexamining special needs education.

The SCT cannot be excluded when examining disability issues in the context of learning; it helps to tap important information for inclusive best practices. The SCT holds that learning occurs in social contexts through observation (Pajares, 2002; Schunk, & Zimmerman, 1998). Referring to the occurrence of learning, the SCT assumes that personal, behavioural, and environmental factors influence one another in a bidirectional, reciprocal fashion. This means that, a person's on-going functioning is a product of a continuous interaction between cognitive, behavioural, and contextual factors. For instance, classroom learning is shaped by factors within the academic environment, especially the reinforcements experienced by oneself and by others. At the same time, learning is affected by students' own thoughts and self-beliefs and their interpretation of the classroom context. A similar proposition is that academic and behaviour modelling takes place through four steps: attention, retention, reproduction, and motivation (Lamport, Graves, & Ward, 2012).

This assumption is true of practices in inclusive classrooms where the nature of teaching and learning materials [environmental factors] are likely to affect students' learning [behavior] being determined by, among others, their perceived self-efficacy [personal factors]. Also, the SCT assumes that people have ability to influence their own behaviour and the environment in a purposeful, goal-directed fashion (Bandura, 2001). That is why Lamport, Graves and Ward (2012) argued that social learning is central to understanding inclusion "because disabled peers can observe their nondisabled peers and their teachers and then imitate them both academically and behaviorally" (p. 56).

Linking the SCT to inclusive classroom contexts, students' interaction with the teaching and learning processes; teaching and learning materials; teachers and among students themselves is dependent upon, but is not limited to, their physical and sensory abilities. This entails that learning by observing is likely to be difficult for students with visual impairment, and experience difficult interacting with physical and social environment; so are students with physical disabilities. Similarly, students with hearing impairment experience difficulties in learning auditory materials and its oral reproduction. This brings the need to explore coping strategies employed by students with such disabilities in getting access to education opportunities in inclusive classrooms.

In recent decades, studies have shown that students have varying learning styles with more preferences in some of these styles than others (Abidin, Rezaee, Abdullah & Singh, 2011; Gilakjani, 2012). Felder and Porter have described some of these varied learning preferences among them

being visual, aural, verbal learners, sensing, kinesthetic, and sequential learners (University of North Carolina-Chapel Hill Center for Teaching and Learning, 1997). Students' learning styles and preferences are even more critical issues to consider when teaching inclusive classrooms where student diversity is likely to be more complex and demanding teachers' awareness of and commitment to responding students' learning needs and aspirations. This implies that in order to address the learning needs of all learners in an inclusive classroom, crafting the teaching styles cannot be taken for granted, rather requires teachers' competence in employing instructional strategies more flexibly in order to meet the specific learning needs of each learner. In this regard, a differentiated instruction is inevitable when considering effective teaching in inclusive classrooms as it is precisely understood as a process of "providing instruction that meets the differing needs of all students" (Gargiulo, 2012, p. 557).

In fact, this is the hardest task that contemporary teachers are to encounter in many countries. Linked to teachers' instructional competence, are students' styles of learning. A student's learning style has to do with the way he or she processes information in order to learn it and then apply the same to immediate and future uses. It is imperative that inclusive pedagogies need to be enhanced and be part and parcel of teacher preparation. The reason for this has been that, most teachers lack the required skills to teach inclusive classrooms; they are not informed about inclusive pedagogy which is believed to a good approach to teaching modern classrooms given their increased complexities (Florian, & Black-Hawkins 2011; Mintz, & Wyse, 2015).

Given the dire need for teachers to appropriate inclusive strategies, Price (2015) using case studies, analysed teacher perspectives of their conceptions of the literacy capability in school settings, special education and mainstream alike, with a view to advancing pedagogies for effective inclusion in Australia. The author believed that, informed by inclusive pedagogy, teachers would be able to nurture and develop the capabilities of learner. In their study, Florian and Black-Hawkins (2011) found that teachers' knowledge, attitudes and beliefs about learners and learning determined their inclusive pedagogies when students faced difficulties with their learning.

Mintz and Wyse (2015) writing about inclusive pedagogy and knowledge in special education in the UK conclude that, the professional development of teachers should be fostered in order to make them best suited for teaching inclusive classrooms. The need for proper teacher training programmes in order to address the challenge of teaching inclusive classroom was also accentuated by Sharma, Simi and Forlin (2015) in the Solomon Islands. To that end, revised teacher training programmes on the Islands, with more practices in employing inclusive strategies during their initial teacher training programmes was important (Sharma et al., 2015). It was believed, by the authors, that this approach would change positively the attitudes of pre-service teachers towards and intention to teach in inclusive classrooms. In their entirety, the fore cited studies emphasize on one major thing: effective teaching in inclusive classrooms requires teacher preparation for inclusion, at least for the 21st century.

## Challenges to the implementation of inclusive education

There are many challenges to the implementation of inclusive education in many countries as well as in Tanzania. Slee (2013) writes that inclusive education suffers from collective indifference, lack of resources and the challenge of consistency, especially in impoverished communities. According to Slee (2013) inclusive best practices in education are hindered by a lack of well trained teachers; and cultural beliefs and practices which prevent girls from exercising their right to education. Further to that, Slee (2013) also argued that the kind of thinking about inclusive education held by people as translated into their discursive practices and actions also impede clear realization of inclusive education; rendering subtle forms of exclusion instead.

Additionally, Adebayo and Ngwenya (2015) found that a lack of instructional materials and human capital being the leading challenges in the implementation of inclusive education, at least in primary schools in one district of Swaziland. Eunice, Nyangia and Orodho (2015), with their study on challenges facing implementation of inclusive education in public secondary schools in Kenya, found that inadequate and poor physical, teaching and learning resources affected negatively the implementation of inclusive education. The authors also found that teachers lacked the required skills to handle the special needs education curriculum. Further to that, socio-economic and cultural variables were found to be common factors that affected the teaching and learning in schools.

Givon and Court (2010) conducted a longitudinal study in Israeli to identify the core coping strategies among high school students with learning disabilities where it was found that, students used avoidance, rebellion, reconciliation, and determination as coping strategies. Of these strategies, according to the authors, avoidance and rebellion were negative and did not lead to full acceptance and integration of the disability with the self-image. Unlike avoidance and rebellion, reconciliation and determination were constructive leading to adjustment and integration with self-identity (Givon, & Court, 2010). Ambati (2015) conducted a study exploring coping strategies used by students with disabilities in managing social and higher educational experiences in Andhra Pradesh, India. It was found that, in order to manage their experiences, students with disabilities built friendships and positive social relationships, used social support, self-advocacy and participation in extra-curricular activities. Such strategies made students with disabilities participate in various social and academic activities. It was further noticed that some students with disabilities lacked important skills to make and maintain friendships. Though based on mutuality and reciprocity, for those who were able to make positive social relations felt more integrated, and vice versa.

Like in other countries, with the list not complete in itself, there have been marked accessibility barriers; inadequate trained teachers; inadequate teaching and learning materials; negative attitudes towards students with disabilities; and poor infrastructure which have made learning for students with disabilities a problem in Tanzania, especially at the epoch of inclusion. With inherently many challenges to inclusive education in Tanzania, undeniably, the learning for SWDs is restricted a great deal. Given the situation, one would wish to understand what is being done by students with disabilities to withstand the challenges, with the ultimate goal being full participation and success in their schooling; this is the aim of this research. To realize this general aim, two questions were addressed by this study: First, what specific challenges do students with disabilities face as they learn in the two inclusive secondary schools? Second, what strategies do students with disabilities use to cope with such challenges?

### **Methods**

#### Design

This study used a qualitative research approach which calls for generation of in-depth opinions and viewpoints directly from respondents. This approach was opted because this study required exploratory responses as could be provided by the target respondents. In this regard, interpretive paradigm informed the present study. This paradigm considers reality as subjective and individually constructed entity, and that a phenomenon is best understood from the participants' perspectives (Scotland, 2012).

Involved in this study were 2 Heads of school, 7 regular teachers, 8 special education teachers, 20 students with disabilities, and 23 students without disabilities, making a sample of 59 participants. Purposive sampling was used to select these participants. Their involvement in this study was based on the following: Heads of school were the immediate and closest implementers of the education policies, and in this regard therefore, the most informed persons on the SWDs' coping strategies in their learning. Regular and special education teachers were selected because they were the ones who interacted with and taught SWDs in inclusive classrooms. They were therefore relevant sources of information sought for by this study.

Similarly, SWDs from Form Three and Form Four were selected because they could provide information pertaining to the challenges and their struggle for education access in inclusive classrooms. Students without disabilities were, as well, selected because they were believed to have constant interaction with their peers with disabilities in their course of learning. It was believed that, these students had knowledge about the learning challenges their peers with disabilities were facing and their respective coping strategies.

### Procedure

Primary data were collected by the researcher through interviews, focus group discussions, and observation.

Interviews: An interview is a scheduled set of questions administered through verbal communication in a face to face relationship between a researcher and the respondents (Kothari, 2004). The use of interviews allowed flexibility, as there was an opportunity for the researcher to restructure the questions. In this study, semi-structured personal interview schedules were used to

collect data. The respondents involved in this regard were Heads of school, regular and special education teachers, SWDs and students without disabilities. Sample interview questions include: 'What are typical problems related to teaching and learning that students with disabilities face in inclusive schools like yours?' (Interview with the Heads of school); and 'How do students with disabilities cope with the daily learning challenges in inclusive schools like this?' (Interview with regular and special education teachers).

Focused group discussions (FGDs): To elicit the required information, FGDs were used in which the interaction of the participants within the group enabled the researcher to get the intended data. FGDs were held with SWDs; where three FGDs consisting of six participants were conducted. Sample FGD questions include: 'Which problems related to teaching and learning do your peers with disabilities experience when they are in the classroom and outside the classroom but within the school?' (FGD with students without disabilities); and 'What teaching strategies do teachers use in their teaching? Are the strategies appropriate to you? If not, what do you do to make sure that you understand what is being taught? (FGD with SWDs).

Observation: The researcher used non-participant observation techniques in collecting data. Yin (2011) contends that, observation increases the chance for the researcher to obtain a valid and realistic picture of the phenomenon being studied. Thus the method helped the researcher to have an opportunity to look at what is taking place in the real situation focusing on coping strategies employed by the SWDs in accessing learning opportunities in the inclusive settings. The use of this method was also a means of overcoming barriers to getting direct information from the informants with hearing impairments.

## Data analysis

The data for this study were first written in Kiswahili and then translated into English. The use of Kiswahili in data collection was meant to allow for respondents to freely express themselves in a language that is more familiar to them which ensured the collection of relevant data. Thematic analysis as offered by Braun and Clarke (2006) was used to analyse the data, which takes place through six phases: familiarising with the data; generating initial codes; searching for themes; reviewing themes; defining and naming themes; and producing the report. In fact, the analysis involved categorizing the data into related themes for detailed descriptions supported by quotations of participants' direct words. In the process, the data were meaningfully classified and cross-checked for errors before finally being presented.

### Ethical issues

Observing ethical requirements is important in the whole process of conducting research, especially the one involving human participants. In this study, the researcher adhered to all ethical requirements related to human rights and research in particular. In this regard, the researcher made the use of research clearances which were obtained from the University of Dar es Salaam and Municipal Director's office. Additionally, the respondents were informed beforehand about the purpose of the study and assured with maximum confidentiality of their views and opinions of which have only been used for the purposes of this study. It was also impressed that participation in this study was voluntary and that withdrawal from the research was open to every participant.

### Trustworthiness of the study

Trustworthiness is a means of demonstrating scientific merit of the qualitative research process. Preliminarily, the researcher made a thorough discussion with his colleagues regarding the best way to tap the data. Informally, in the course of looking for research permits, the researcher deliberately asked his colleagues and some experts in the area several questions that were intended for the study from which the responses were used to consolidate and make them more appropriate. In fact, the questions were used flexibly during data collection phase. Overall, the researcher adhered to both Burns and Grove's requirements for appraising qualitative research namely; documentation, procedural, and ethical rigour; and credibility, dependability, transferability and confirmability criteria (Ryan, Coughlan, & Cronin, 2007).

#### **Results**

The findings of this study emerged in two major themes reflecting the research questions. These themes are challenges and coping strategies used by students with disabilities. The theme on the challenges is divided into two sub-themes: teacher-related and environment-related challenges. On the other hand, the theme on the coping strategies in divided into five sub-themes namely, the

use of complaints, seeking assistance, isolation and despair, self-initiatives, and assertiveness. A further presentation of these themes is as follows:

## Theme 1: Typical challenges encountered by students with disabilities in inclusive schools

This study revealed various challenges with which students with disabilities were faced in the studied inclusive secondary schools in their daily school life. The challenges included:

### *Sub-theme 1: Teacher-related challenges*

The study found that there were few special education teachers; consequently, regular teachers who were many used to teach the students with special educational needs. This made students with disabilities to be excluded in the teaching and learning processes rendering their poor academic performance. A lack of specific skills to teach inclusive schools among regular teachers made some of them even forget that their classes had some students with disabilities, and that they ought to adjust their teaching to meet the diverse needs of learners. The narratives from one of the teachers are worth noting:

"... you know, most of the teachers in this school don't have background in special education. This makes them fail to consider the students with disabilities when they teach, their teaching is done as if the classes don't have students who require special attention, they forget about this. This makes the students with special needs get the feel of being ignored by such teachers. Well..., off course, even if we have not been trained in special education to such an extent, we need to learn how to consider our students with disabilities in our classrooms, I guess..." [Interview, Regular Education Teacher].

## Sub-theme 2: Environment-related challenges

Physical and social environment alike were found to be restrictive for students with special educational needs to learn. The learning environment was characterized by inappropriate teaching and learning materials used by teachers coupled with a lack of appropriate teaching and learning materials to meet diverse needs of students in inclusive classrooms. Furthermore, the respondents informed about the presence of poor school infrastructures and facilities which hindered learning for students with disabilities.

Also, it was found that there was weak peer cooperation between students with disabilities and those without disabilities. In exploring the social environment of students with disabilities, most of the students without disabilities were not willing to assist their peers with disabilities. Instead, those who had minor cases of disabilities took a lead in supporting their peers with severe cases of disabilities; a kind of *birds of a feather flock together*. Overall, in one of the interviews with the special education teacher, such problems have been contributing to making the learning environments not conducive for SWDs as he puts it that:

"Students with disabilities especially those with VI face many problems in their learning. There is a lack of cooperation between them and their fellow non-disabled ones; sometimes not regarded by their teachers. It becomes difficult when there are drawings presented, and there is lack of sufficient equipment for such students in the classrooms" [Interview, Special Education Teacher].

Similar to the students with VI, those with HI had problems they experience in their school life. The most reported problem that students with HI experience at school in as far as teaching and learning is concerned is their teachers' and fellow students' incompetence in the sign language. This makes them face difficulties in understanding what is being taught.

However, it should be noted that, the physical infrastructure like friendly pavements for students with visual impairments and physical disabilities to move through were observed to exist by the time the research was conducted. This signals the awareness of the educational leaders and administrators, and the government in general about the special needs of SWDs in the schools. Accounting on this, one of the teachers narrated that:

"...what the government has tried to do, for example in the pavements, unlike the past days, has made these, wooden supports which mark the margins of the way through which they move, not for them to fall into the side ways. These have been made especially for them, so that they can

recognize easily where to pass through...even around their dormitories similar signs have been made to allow them to move easily." [Interview, Regular Education Teacher].

Similarly, one of the special education teachers in one of the interviews had this to say:

"...partly they have tried, even yourself if you move through, there are some modifications made, the steps have been reduced; you can see, if you go at the administration block for example, there are some wooden buttresses so that if the students touch them when moving help to signal that they are at the margin of the pavement, thus need to adjust accordingly in their movements." [Interview, Special Education Teacher].

## Theme 2: Coping strategies that students with disabilities use in accessing education in inclusive schools

This study examined coping strategies that students with disabilities use in accessing learning opportunities in inclusive schools. A number of strategies were reported by different informants involved in this study as presented subsequently.

## *Sub-theme 1: The use of complaints*

While appreciating that students with disabilities face several challenges related to teaching and learning such as being forgotten by some teachers when teaching, one teacher reported that such students were very good at complaining when something wrong was done to them by their teachers and fellow students. Through their complaints some of their problems were worked out as a result.

"The students with disabilities, especially those with visual impairment, complain much when something wrong happens to them, or is done to them by anybody, and off course, through such complaints on genuine issues, their concerns are communicated to teachers and school administration, and finally settled" [Interview, Regular Education Teacher].

Additionally, several students without disabilities reported on similar cases, that their peers with disabilities were in most cases complaining, according to students without disabilities, even on trivial issues.

## *Sub-theme 2: Seeking assistance from their peers and teachers*

Seeking assistance from their peers was one of the most common strategies that were reported to be used by the SWDs in enabling them cope with the daily learning difficulties. SWDs, more often in their learning reported to have sought assistance from their peers in several instances of their learning. The peers assisted the SWDs in different spheres such as socialization, helping them attend classes and call of nature, and many other support services. Specifically, with the learning support, classmates served several purposes such as reading them the notes so that they write the same in least restrictive formats. For example, in one of the interviews with the SWDs, one of the students with disabilities had this to say:

"When teachers teach we listen attentively to them and where we don't understand we ask questions. We don't write notes in the classes because it's hard for us to see. What we do is that after class hours we ask our friends to read their notes for us so that we translate them into Braille notes for easy reading" [Interview, Student with Disability].

## Similarly, in one of the FGDs, one of the responding teachers commented that,

"In order for the blind students to cope up with their learning, they usually have to have their own notes from their fellow students. They ask assistance from their classmates to read for them so that they can write similar notes for their easy reading and learning." [FGD, Regular Education Teacher].

As for the students with hearing impairments, the use of friends was observed to be used the most in inclusive classrooms despite the fact that most of the students without disabilities had little knowledge of the sign language. In relation to this, one of the teachers in special education unit from one of the school's states:

"Teaching inclusive classes of this type is a bit challenging as not all teachers in this school are conversant with the sign language. This makes them only teach as normal as possible without helping those with hearing impairments in their teaching when in classes. The good thing is that there are some students in inclusive classes who know sign language. What we do is to encourage such students to help their fellows who have hearing impairments, and we encourage all the students to learn the sign language by all means possible. If this is achieved, the students with hearing impairments will be assisted easily by all of their peers." [Interview, Special Education Teacher].

The use of peers in assisting them to learn and hence cope with their daily challenges was also made clear when the researcher interviewed one of the heads of school and this was the response:

"We are happy that there are some students who have been assisting their fellows with disabilities in many activities at this school. This is a good thing and we have been encouraging all students towards this behaviour. Indeed, teachers alone cannot manage to assist all students with disabilities, but their peers are able to supplement the assistance as in most cases they are together." [Interview, Head of School].

Apart from seeking assistance from their colleagues without disabilities, it was reported that SWDs were constantly seeking for assistance from teachers in cases where the lessons were not well understood. The assistance sought was mainly in form of remedial teaching after regular class hours. This is vivid when one of teachers in one of interviews with him narrates:

"Generally, the students with disabilities struggle much in making sure that they learn as their peers. When in classes, the students with visual impairment normally ask questions in areas which they do not understand. Because of insufficient time in the class, after class hours they usually ask their teachers to assist them by re-teaching the lessons for a better coverage and understanding of the lessons as their fellows without disabilities" [Interview, Regular Education Teacher].

## Sub-theme 3: Self-initiatives

In cases during which there were no teachers specially trained in special needs education, the SWDs were supporting themselves in their learning, especially during assessment times. In this, students from higher classes acted as teachers for the lower class levels whereby they used to examine and mark the assignments and examinations for lower classes. They did this with the help from regular teachers. In regard to this, one of the students with visual impairments during one of the FGDs reported that,

"When we don't have teachers who can mark our examinations in the form of Braille we assist among ourselves. Students from higher classes become our teachers who type our examinations, mark and grade them using Perkin Braille. That is what we do during those times!" [FGD, Student with Disability]

### Sub-theme 4: Isolation and despair

Unrealistically as this may appear, isolation and despair have been taken as one of the initiatives that students with disabilities take in inclusive schools following various learning challenges. Following the interviews conducted to probe coping strategies used by students with disabilities, most of the students without disabilities informed that there were some SWDs who normally isolated themselves. Also, it was reported that there were some students with disabilities who took no action even if they did not understand in the classes when teachers were teaching. In one of the FGDs with students without disabilities, one of the responding students contends:

"These students with hearing impairment do not like to cooperate with us. Even if you try to direct them on what has been taught, they are very aggressive. They study only when they like, you cannot tell them something related to learning and yet accept. They are cool as such regardless whether they face difficulties in the subjects or not; they ask none for assistance. This makes some of us fail to assist them even if we are in the position to." [FGD, Student without Disability].

*Sub-theme 5: Assertiveness (Aggression)* 

In the course of this study, assertiveness was observed and reported by different informants. It was seen that, characteristically, some students with disabilities were blamed for their aggressive behaviours within and outside the classrooms. This is supported by one of the responding regular teacher who holds that

"...the students with hearing impairments are often very aggressive to both their fellow students and teachers especially when they are identified with particular problem behaviours' [Interview, Regular Teacher]. Similarly, one of the other responding regular teacher reports that '...students with hearing impairments normally isolate themselves from their fellow students due to different problem behaviours." [Interview, Regular Teacher].

However, many responding special education teachers and SWDs appreciated inclusive schooling with the view that by learning inclusively they are supporting each other academically, and more importantly they are not expected to live in isolation after schooling. In this view, inclusive schooling was reported to enhance social acceptance and friendship. This was evident when one of the students with disabilities reports that:

"I am comfortable to be in inclusive school because we interact with our fellows without disabilities. They assist us in many things and we also assist them....it is better to learn together because in the society we are not living alone. This reduces segregation." [Interview, Student with Disability].

This observation is also supported by one of the special education teachers who insisted that 'It is a good practice to include students with special education needs in regular classrooms because they are not living on an island! They must be involved in normal learning environments although there are challenges...' [Interview, Special Education Teacher].

#### **Discussions**

This study sought to establish challenges faced by SWDs and coping strategies used by these students in inclusive secondary schools. The study found that students with disabilities encounter several challenges in their schooling, replicating the findings of previous studies (Hakielimu, 2008; Kapinga, 2010; Kayombo, 2010; United Nations Education Science and Cultural Organization, 2015; URT, 2008). The challenges found are, indeed, related to learning environments, students' expectations and aspirations, the kind of student-student cooperation and attitudes towards SWDs, and teacher characteristics. Specifically, it was found that teachers who could teach students in special needs were very few coupled with inadequate teaching and learning resources which could be helpful for SWDs. The findings are also in agreement with the findings of studies conducted in other countries on similar topic. Such studies include those done by Adebayo and Ngwenya (2015); and Eunice et al. (2015) which on the whole reported on lack of appropriate human resources for inclusive teaching and poor facilities as some of the factors hindering successful implementation of inclusive education.

As the means of ensuring equal access, participation and success in their schooling, SWDs sought assistance from their peers without disabilities and teachers, and sometimes used complaints to communicate their feelings and educational needs. Social support is important in inclusive schools. Also, SWDs took self-initiatives to make sure that they achieve their educational goals, a kind of *self-advocacy* (Ambati, 2015). In addition, these students were reported to develop assertive behaviours and isolated themselves from their normal peers. These were the coping strategies employed by the SWDs in the studied schools in order to reach their goals: the *'functionings'* and *'doings'* in the capability approach sense (Robeyns, 2005; Terzi, 2010). The findings of the present study match with what was found by Givon and Court (2010) and Ambati (2015). Givon and Court (2010) reported that there were both negative and constructive strategies that students with learning disabilities used in their course of learning in Israeli.

While the negative strategies hindered acceptance and integration of the disability with the self-image, the constructive strategies led to adjustment and integration with self-identity (Givon, & Court, 2010). For this reason, strategies like self-initiatives and assistance-seeking from the present study need to be enhanced wisely as they are constructive in nature. In a way, they help to build confidence in students on one hand, and promote social acceptance among students and

teachers on the other. However, students' use of complaints, assertive behaviours and isolation provide destructive cases which need to be reduced through appropriate procedures in order not to intensify the same. It is hoped that if these issues are attended accordingly, the learning atmosphere for all students will be enhanced: a practical realization of inclusive schooling.

In the same vein, Ambati (2015) found that, students with disabilities built friendships and positive social relationships, used social support, self-advocacy and participation in extracurricular activities in order to run their school life more successfully. In view of the present study, these similar findings imply that SWDs depend much on the support from people around them to succeed in their schooling. While recognizing their efforts, other people should not detach form supporting them. Indeed, such mechanisms at different times served as springboards for SWDs towards achieving their educational needs within inclusive settings with successes and failures though. These findings imply that the teaching strategies and or methods used in teaching inclusive classrooms were not as appropriate as were supposed to be, hence causing more learning difficulties to students with disabilities, especially those with visual and hearing impairments. This is congruent with the study by Kayombo (2010) which investigated teachers' competency in handling pupils with disabilities in inclusive primary schools in Tanzania whose findings were, among others, the presence of insufficient teaching and learning materials coupled with inappropriate teachers' teaching methods.

Parallel to the inferred inappropriate teaching methods leading to unbearable complaints of the SWDs in inclusive schools, the other similar implication is the existence of low expectation of SWDs and negative attitudes of some students without disabilities and teachers towards SWDs. This is obvious when some of the teachers and students saw the need for SWDs to be sent to separate schools thinking that it is the right educational placement for the same. This finding concurs with the findings by Kapinga (2010) who reported that most teachers had negative attitudes towards students with disabilities. It is important underlining that, teachers' attitudes and beliefs about students with disabilities and inclusion are critical for their classroom practices. Shaping them to align with effective practices for inclusion becomes a necessary endeavour both for pre-service and in-service teacher training programmes. All these findings concur with the reviewed literature (e.g. Adebayo, & Ngwenya, 2015; Eunice et al., 2015; Polat, & Kisanji, 2009; Slee, 2013) regarding the philosophy behind inclusive education and challenges in implementing it in different parts of the world and Tanzania in particular. It is apparent that the use of assistance from their peers without disabilities and teachers call for the urgent need of ensuring that the positive relationships among all the groups of students are promoted effectively. The fact is that teaching and learning in inclusive classrooms is not one's own job, rather requires joint efforts of all key actors in inclusive settings in order to make education ends meet.

This understanding suggests that despite the challenges in place regarding inclusive education, the immediate education stakeholders must realize the need to adjust themselves to suit inclusive teaching and learning ethos. Among others, as Kimathi (2010) in her study on the perception of teachers' and students' of the social support for pupils with disabilities in inclusive schools, these findings are in line with the recommended actions of her study that teachers need to adopt teaching strategies that foster interaction among students within inclusive settings as a means of fostering cooperation. This entails that cooperative and peer tutoring are in essence central to teaching inclusive classrooms.

## Limitations

In the present study, it was difficult collecting data from some participants especially, those who had hearing impairments and the deaf, as they could not express themselves in a normative way. In such circumstances, with the help of their peers and teachers who knew sign language, the informants were made to write down their responses during FGDs. Respondents who had visual impairments were accessed orally through personal interviews.

#### **Conclusions**

SWDs are still studying under challenging environments in Tanzania despite the efforts by the government and other educational stakeholders to foster suitable learning environments for all learners. Under such circumstances, the only option at hand is to jointly face the stumbling blocks to its implementation as consistent with the current study findings. The coping strategies used by

SWDs cannot be taken for granted. Instead, they provide us with pertinent information about education of this population in the umbrella of education for all with many subtle issues taking place in inclusive schools. Unless such issues are addressed vigorously, the call for inclusive education and its actual implementation in the Tanzanian context will not be achieved as hoped, but continue to be an indefinite paper-work process rather than a definitely realized process of social change.

Now, it is imperative to re-illuminate the existing teaching and learning environments inherent in the inclusive educational settings; a process that requires coordinated effort to train teachers with inclusive pedagogies. Alarmingly, it is well said that effective school and teacher characteristics have been documented to influence positively students' achievement and outcome in inclusive classrooms. This implies that the modern school leadership should work to achieve inclusive practices. Informed by leadership practices with inclusive orientations, such leaders will be able to consider diversity in whatever they plan and institute in their work places. Being role models in this case, other staff will learn from them and ultimately develop a community of practice in inclusive schools.

#### **Recommendations**

Given the noticed inadequacies of inclusive learning environments and their ultimate impact on learning to SWDs, there is a need for the regular teachers and students without disabilities to be oriented to sign language. This will enhance understanding of the lessons and ease social interaction among students within inclusive schools. Looking for the future, there is a need for the teacher training institutions, through the government or on their own accord, to revisit their preservice teacher training programmes and curricula with a view to enhancing important components of empowering teacher trainees with the basic knowledge and skills of inclusive education and the implications to them as future teachers. This could involve the expansion in training teachers specializing in different areas of students' needs and exceptionalities. As a short term strategy, planning for in-service teacher training on effective instructional strategies to meet the diverse needs of learners in inclusive classrooms would serve similar purpose; making such settings better places to learn for all persons.

Furthermore, counselling units should be promoted in inclusive schools which will help to promote acceptance of individual differences among and between teachers and students. This could be accompanied by in-school trainings on what it means to have a disability and the importance of valuing one another. This will create an understanding of problem behaviours of students with disabilities and implications these have on other students as they study together with these students.

Future studies should be done in other regions in order to have appropriate generalizations; this will help to have a fuller understanding of the phenomenon in the country. Also, it is recommended that another study should be done to assess the effectiveness of the coping strategies used by students with disabilities in their schooling.

### Significance of the study

The study aimed to examine challenges and coping strategies that students with disabilities use in accessing education in inclusive schools. Generally, this study has the following novelties:

First, it provides useful information to education stakeholders, thus enabling them to find appropriate ways of assisting students with disabilities, who for long time, have been excluded from accessing education equitably in inclusive settings. Through this study, peers, teachers, parents, non-governmental organizations and the general public are informed about the initiatives taken by students with disabilities in their school life; and what such strategies entail in including students with disabilities in regular schools. Rethinking about these strategies would help improve the learning environments for students with special educational needs in Tanzania.

Second, this study provides the basis for future research in the area of inclusive education in Tanzania and elsewhere in the world, especially focusing on how students with disabilities can be assisted to be as independent as possible when at school and life after schooling.

Third, it enlightens the international community on practical experiences of students with disabilities from a developing country as we celebrate a good number of years since the inception of

inclusion. The enlightenment will help to draw the attention of interested parties in assisting the students with disabilities in realizing their right to education more successfully.

#### **References:**

Abidin, M. J. Z., Rezaee, A. A., Abdullah, H. N., & Singh, K. K. B. (2011). Learning styles and overall academic achievement in a specific educational system. *International Journal of Humanities and Social Science*, 1(10), 143-152.

Adebayo, A. S., & Ngwenya, K. (2015). Challenges in the implementation of inclusive education at Elulakeni cluster primary schools in Shiselweni district of Swaziland. *European Scientific Journal*, 11(13), 246-261.

Albert, B. (2004). Disability debriefing note: The social model of disability, human rights and development. Retrieved on 15-07-2012 from: http://www.enil.eu/wp-content/uploads/2012/07/The-social-model-of-disability-human-rights-development\_2004.pdf.

Ambati, N. R. (2015). Coping strategies used by students with disabilities in managing social and higher educational experiences. *The International Journal of Indian Psychology*, *2*(3), 58-74.

Bakhshi, P. & Trani, J. F. (n.d.). *The capability approach to understanding disability: increasing comparability, defining efficient programs*. Retrieved on 10-06-2016 from: http://www.ucl.ac.uk/lc-ccr/lccstaff/jean-francois-trani/BakshiTraniAFD060306.pdf.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26.

Eunice, L. A., Nyangia, E. O., & Orodhom, J. A. (2015). Challenges facing implementation of inclusive education in public secondary schools in Rongo sub-county, Migori county, Kenya. *Journal of Humanities and Social Science*, 20(4), 39-50.

Florian, L., & Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British Educational Research Journal*, *37*(5), 813–828.

Gargiulo, R. M. (2012). Special education in contemporary society: an introduction to exceptionality (4th ed.). California: SAGE Publications.

Gilakjani, A. P. (2012). Visual, auditory, kinaesthetic learning styles and their impacts on English language teaching. *Journal of Studies in Education*, *2*(1) 104-113.

Givon, S., & Court, D. (2010). Coping strategies of high school students with learning disabilities: a longitudinal qualitative study and grounded theory. *International Journal of Qualitative Studies in Education*, 23(3), 283-303.

Hakielimu. (2008). Do children with disabilities have equal access to education? A research report on accessibility to education for children with disabilities in Tanzanian schools. Dar es Salaam.

Kapinga, D. J. (2010). Regular primary school teachers' attitudes towards the inclusion of pupils with intellectual disability in inclusive schools in Iringa municipality, Tanzania. (Unpublished master's dissertation). University of Dar es Salaam, Dar es Salaam.

Kayombo, B. (2010). *Teachers' competency in handling pupils with disabilities in inclusive primary schools in Tanzania*. (Unpublished master's dissertation). University of Dar es salaam, Dar es Salaam.

Kimathi, P. P. (2010). *Perception of teachers and pupils of social support for students with disabilities in inclusive primary schools in Dar es Salaam*. (Unpublished master's dissertation). University of Dar es salaam, Dar es Salaam.

Kothari, C. R. (2004). *Research methodology: methods and techniques (2nd ed.)*. New Delhi: New Age International Publishers Limited.

Lamport, M. A., Graves, L., & Ward, A. (2012). Special needs students in inclusive classrooms: the impact of social interaction on educational outcomes for learners with emotional and behavioral disabilities. *European Journal of Business and Social Sciences*, 1(5), 54-69.

Lang, R. (2001). *The development and critique of the social model of disability*. Retrieved on 20-06-2016 from: http://www.ucl.ac.uk/lc-ccr/lccstaff/raymond lang/DEVELOPMMENT\_AND\_CRITIQUE\_OF\_THE\_SOCIAL\_MODEL\_OF\_D.pdf.

Miles, S., & Singal, N. (2010). The education for all and inclusive education debate: conflict, contradiction or opportunity? *International Journal of Inclusive Education*, 14(1), 1-15. doi:org/10.1080/13603110802265125.

Mintz, J., & Wyse, D. (2015). Inclusive pedagogy and knowledge in special education: addressing the tension. *International Journal of Inclusive Education*, 19 (11), 1161-1171.

Mitra, S. (2006). The Capability Approach and disability. *Journal of Disability Policy Studies*, 16(4), 236-247.

Pajares, F. (2002). *Overview of social cognitive theory and of self-efficacy*. Retrieved on 14-02-2012 from: http://www.emory.edu/EDUCATION/mfp/eff.html.

Polat, F., & Kisanji, J. (2009). *Inclusive education: A step towards social justice*. A research programme consortium on implementing education quality in low income countries. EdQual working paper No. 16

Price, D. (2015). Pedagogies for inclusion of students with disabilities in a national curriculum: a central human capabilities approach. *Journal of Educational Enquiry*, 14(2), 18-32.

Robeyns, I. (2005). The Capability Approach: A theoretical survey. *Journal of Human Development*, *6*(1), 93-117.

Ryan, F., M. Coughlan, & Cronin, P. (2007). Step-by-step guide to critiquing research. part 2: qualitative research. *British Journal of Nursing*, *16*(12), 738-744.

Schunk, D., & Zimmerman, B. (Eds). (1998). *Self-regulated learning: From teaching to self-reflective practice*. New York: Guilford Press.

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9), 9-16.

Sharma, U., Simi, J., & Forlin, C. (2015). Preparedness of pre-service teachers for inclusive education in the Solomon Islands. *Australian Journal of Teacher Education*, 40(5). doi.org/10.14221/ajte.2015v40n5.6.

Slee, R. (2013). Meeting some challenges of inclusive education in an age of exclusion. *Asian Journal of Inclusive Education*, 1(2), 3-17.

Terzi, L. (2010). Justice and equality in education: A capability perspective on disability and special educational needs. New York: Continuum.

Toboso, M. (2011). Rethinking disability in Amartya Sen's approach: ICT and equality of opportunity. *Ethics and Information Technology*, 13(2), 107-118.

United Nations Education Science and Cultural Organization (1994). *The Salamanca statement and frame work for action on special needs education*. Paris: United Nations Educational Scientific and Cultural Organization.

United Nations Educational Scientific and Cultural Organization (2001). *Open file on inclusive education*. Paris: United Nations Educational Scientific and Cultural Organization.

United Nations Educational Scientific and Cultural Organization (2015). *Embracing diversity. Toolkit for creating inclusive, learning-friendly environments.* Bangkok: United Nations Educational Scientific and Cultural Organization

United Nations International Children's Emergency Fund (2011). The right of children with disabilities to education: a rights-based approach to inclusive education. Geneva: United Nations International Children's Emergency Fund.

United Republic of Tanzania. (2008). *The development of education: National report of the united republic of Tanzania*. Tanzania.

University of North Carolina-Chapel Hill Center for Teaching and Learning (1997). *Teaching for inclusion: Diversity in the college classroom*. University of North Carolina. Retrieved on 13-07-2012 from: https://ssw.unc.edu/files/web/pdf/TeachforInclusion.pdf

Yin, K. R. (2011). Qualitative research from start to finish. New York: The Guilford Press.



Copyright © 2016 by KAD International All rights reserved.
Published in the Ghana

http://kadint.net/our-journal.html

RESEARCH ARTICLE



# Copyright or Right-To-Copy? Towards the Proper Between Freedom of Expression and Copyright in Cyberspace

Irina V. Shugurova a, \*, Mark V. Shugurov a

<sup>a</sup> Saratov State Law Academy, Russian Federation

Paper Review Summary: Received: 2016, April 10

Received in revised form: 2016, November 08

Acceptance: 2016, November 09

#### Abstract

This article examined the renewed theoretical approaches to seeking the proper balance between the human right to freedom of expression, opinion and information on the one hand, and copyright on the other hand. This analysis was done with regard to the context of current information society's digital environment. This article showed that the way of striking a renewed balance between the two is by reforming the existing copyright law. It is recommended that, an upgraded copyright law must be able to prevent the tensions between exclusive rights and the right to freedom of expression.

**Keywords:** Copyright, Freedom of Expression, Harmonization, Human Rights, Information Society, Restrictions and Limitations,

#### Introduction

Amidst the serious problems affecting the development of the existing information society is the problem of collision and conflict between fundamental human rights, intellectual property rights [IPRs] and copyright. The most significant aspects of this general problem is the tension formed as a result of conflicting rights expressions, especially within the digital environment (Voorhoof, 2015).

The conflict between copyright and human rights is currently becoming very tangible as the global cyberspace advances. In order to build a proper [fair and effective] new balance between these contradictive rights, one has to battle with some important conflicting issues. Fundamental among these issues is the effort needed to simply contest the scope of copyright. Additionally, seeking a new balance is desirable to avoid the underestimation of the position of authors' economic and moral rights against the achievement of an unlimited exercise of the right to freedom of expression, opinion and information. For that reason, there emerges the necessity to examine new theoretical perspectives (Feyter, & Pavlakos, 2008; Sané, 2007; Winston, 2010).

These new theoretical perspectives should incorporate a more effective, fair, explicitly defined balance between interests of copyright owners on the one hand, and users' right to the freedom of expression, on the other hand. In addition, profound rethinking of global legal systems

.

E-mail addresses: ivshugurova@mail.ru (I. V. Shugurova), shugurovs@mail.ru (M. V. Shugurov)

<sup>\*</sup> Corresponding author

and other stakeholders will be needed to construct this novel balance, both in practice and the enactment of appropriate legislative measures. At the level of legal doctrine, the interrelation between the freedom of expression and copyright [in the light of new approaches] must take into account, the new nuances of their realization in the context of the digitized information society.

As a result, this article examined the transformed theoretical approaches to seeking the effective and fair balance between the human right to freedom of expression and copyright within the digitized information society.

#### **Methods**

Given the problem of striking the proper balance between the freedom of expression and copyright in the modern information society, this analysis is founded on the following research questions regarding intellectual property [IP];

- 1. What are IPRs tools for or barriers to exercising of digitized human right?
- 2. Are they tools for providing an open information environment or tools for numerous restrictions?

{These questions are fundamental for global e-development of Information and Communication Technology [ICT]. There are solid reasons to recognize that the clear determination of the nature of IP in the ICT age and nature of contradiction between copyright and free expression would serve better, the transition unto a balanced system of digitization}.

3. What is regarded as tensions; internal or external conflict?

{There are lots of arguments concerning the nature of an external conflict between human rights and copyright. Where freedom of expression and copyright are being seen as something alien to each other, copyright is explicated as the barrier to the full exercising of information rights. This often limits the access to information contained in an author's works}.

This article is based on reviews of existing and past international data and documents on IP, IPRs, Copyright, Human Rights, Information Society, and Freedom of Expression.

#### **Results**

The findings are organized into the following themes. These include; (a) freedom of expression and copyright: most sensitive issues, (b) the human rights, the free expression and copyright, and (c) copyright through lens of the dichotomy 'idea – expression'.

### Theme 1: Freedom of expression and copyright: Most sensitive issues

It is fair to say that tensions between copyright and the freedom of expression are regarded broadly in the context of possible restrictions on the freedom of expression. "If one accepts the idea that freedom of expression is a dynamic freedom, one must accept that not only may it expand, it may also be reduced. And if nature of freedom entails – as for any other freedom – the question as to what the limits to freedom of expression are, who should fix them and what the consequences are if these limits are not respected" (Zeno-Zencovich, 2008, p. 2). It is noteworthy that the freedom of expression is no absolute right at all. It is therefore, subjected to numerous restrictions on legible grounds and specified by international human rights law.

The freedom of expression and information can really be limited under the copyright law. This fact evokes great anxiety. It seems the anxiety has gradually risen up in the modern democratic society, though copyright is no foundation for an automatic restriction on the right to free expression, opinion and information. In a different way, copyright dilutes the freedom of expression and even undermines them. It is one of the sorts of private-property rights that serves as the foundation for liberal and democratic society and its economy [e.g. *viewed as the legal primacy*] (Smith, 2007). Hence, copyright can be perceived, in a way, as a limitation of the right to freedom of expression and the barrier to its realization respectively.

In effect, none of the restrictions of the freedom of expression, on the grounds of copyright protection may be imposed by authorities. This condition is possible if it is clear that exercising the right to freedom of expression gives effect to grave violations of exclusive rights of copyright holders. These restrictions have to be prescribed demonstratively by the national law and be consistent with international law. As the European Court of Human Rights [ECtHR] suggests, non-pertinent and unbalanced restrictive interferences with the right to freedom of expression and

information risk have a 'chilling effect' on the democratic society and its development (Voorhoof, 2015).

The freedom of expression, being subjected to various limitations and restrictions remains definite vis-à-vis the various branches of national laws (Voorhoof, 2015). Copyright cannot have abstract external and internal limitations to the freedom of expression. All the same, a case-law of the European Union [E U] and the ECtHR demonstrates that, the right to the freedom of expression and information can acts as a concrete constraint of copyright. The point is that, copyright should take into account the restrictions placed on the freedom of expression due to the interest of copyright holders in the digital environment (Voorhoof, 2015). In a more critical perspective, the freedom of expression has to respect copyright because copyright as a part of the right to property, needs protection and respect.

A disrespectful relation to copyright, that is one of the conditions of cultural and economic progress, necessitates tensions and abuses of authors' exclusive rights [these interests are imperiled by the exercise of the freedom of expression]. In this case, the right to freedom of expression is not seen as a remedy for the infringement of copyright. In other words, the freedom of expression should not be eccentric as to another group of interests [e.g. interests of holders of exclusive rights]. This idea is consistent with some generalizations of Daniel J. Baum. He stressed the need for balancing the human right of freedom of expression against other legitimate interests. "Freedom of expression principles can come into play in numerous settings" (Baum, 2014, p. 12).

From our analysis, copyright only creates some difficulties vis-à-vis the exercising of freedom of expression, rather than blocking its full realization. According to Craig (2011), "if the freedom of expression protects individual's rights to express herself without limitations imposed upon the content of her speech, copyright prevents the individual from expressing herself through another's copyrightable expression" [p. 203]. However, signed barriers are by no means absolute also because of rules on authorized use of author's content. Erected barriers are found in certain situations, to be precise; (a) situation of imbalance between interests of authors and users, and (b) the legacy legislation in the area of copyright protection.

In finding the agreed common ground between the copyright law and the freedom of expression, the debate on implementation of the ACTA [Anti-Counterfeiting Trade Agreement, 2011] in Europe, and the SOPA [Stop Online Piracy Act, 2011] and the PIPA [Protect Intellectual Property Act, 2011] in the United States of America had exhibited some challenges. These clearly revealed that, attempts to strike the balance between rights of authors and rights of users are not easy, especially when governments are perceived by relevant stakeholders as responding much more to pressure from economic entities, safeguarding mainly their profit margins (Benedek, & Ketteman, 2014).

#### Theme 2: The human rights, the free expression and copyright

The complexity of this conflicting relations is that, copyright is not just recognized as private-proprietary entitlement, but also as one of the fundamental human rights. This recognition permits the transition from the context of the problems of copyright protection to that of what is protected [originality, idea, data, form] and the scope of exercising exploitation rights. This approach ignores the awareness that copyright is also a human right. Of course, this fact complicates the understanding and possible resolution of the assumed conflict between the two. Nevertheless, it allows for an opportunity to upgrade the status, application of copyright and to renew the understanding of its enforcement as a law. This is done in the vein of a need for shift of copyright paradigm in accordance with the spirit of information society and the full realization of the right to freedom of expression. Thus, there is a complex problem of scrutinizing the correlation between copyright, [as one of the human rights] and the other human rights (Council of Europe, 2008).

Copyright, among other things, has the status of the human rights due to such rights like; the right to property and the right to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he or she is the author [Article 15(1)(c) of the International Covenant on economic, social and cultural rights/ICESCR]. Therefore, the human rights approach to IPRs in general and copyright in particular is valid in many ways (Chapman, 2002; Helfer, & Austin, 2011; Helfer, 2007; Yu, 2007).

But unfortunately, the right to protection of the moral and material interests of creators is often not mentioned within the catalog of economic, social and cultural rights (Donnelly, 2003;

Helfer, 2007; Rehman, 2009; Ssennyonjo, 2010). This is an essential deficiency in the legal doctrine. However, at the same time, amidst scholars and activists, there is a conveyed issue on clarification of obligations provided for by the ICESCR. By ratifying or acceding to the Covenant [ICESCR], States parties freely assume a wide range of binding obligations. "However, the nature of the obligations that it imposes has been the subject of controversy" (Sepúlveda, 2003, p. 2).

At once, the typology of States Parties' obligations has been elaborated in detail in the international legal doctrine and this includes obligations to respect, protect, fulfill [facilitate, provide, promote] these rights (Chapman, 2001). Besides, there is a modest consensus on scope of these states' obligations. As Mary Dowell-Jones argues, "the normative composition of socioeconomic rights in international law is therefore much more fluid than of civil and political rights, with states agreeing to achieve them progressively to the maximum of available resources rather than undertaking to respect and to ensure them as is the case with civil and political rights" (Dowell-Jones, 2004, p. 54).

Regarding states' obligations in area of IPRs protection, there are several detailed obligations enshrined in the body of international legal instruments. The obligations under these instruments are implemented at the national legislative level. Apparently, this circumstance leads to an emergence of a dissonance - accompanying the encompassing copyright and the freedom of expression. In this sense, it is difficult to assert that IPRs, including copyright, is the marginalized range of rights in comparison with other economic, social and cultural rights as Croven (1998) had stressed. The obligations of states under Article 15(1)(c) of the ICESCR are expressed clearly and exist as an autonomous subject matter. More so, with regard to protection of moral and material interests of creators, the states' obligations are sufficiently obvious. The right to protection of works of mind is an immanent element of author's rights.

The departure of human rights-based approach to copyright from the human rights of authors belong to the second generation of international human rights. Indeed, "persistent false distinctions between civil and political rights, and economic, social and cultural rights, and lack of understanding of the legal nature and content of economic, social and cultural rights have undermined effective action on economic, social and cultural rights" (Clapham, 2007, p. VIII). We propose that the nature of copyright as a human right is in twofold. On the one hand, copyright is a type of the human right to property, and, on the other hand, it may be viewed undoubtedly, in a way, as result of the free expression and free creativity. [Incidentally, copyright could be examined as the human right in the context of the right to freedom of expression and right to free creative activity]. In both cases, copyright can also be guaranteed, for example, under the ECHR and the ICESCR as the human right or under the EU's Charter of fundamental rights as the fundamental rights.

As it can be seen, the ICECR recognizes such author's rights as moral rights. Indeed, the digital environment functions as a space for the freedom of expression. This affects not only the exclusive (economic), but also the moral rights of authors. The moral right means that the creator has continuing interest vis-à-vis ensuring respectable treatment with his /her work. While the creator transfers the exclusive rights to another, and therein losing the economic interest in created works, he (or she) retains an inmost linkage with one's own works. Anyway, the digital environment affects similarly not only the exclusive, but also his (or her) moral rights. The creators are especially interested in integrity of their created works, as they can undergo some form of modification. This is becoming easy on the new technological platform.

The 'human rights-based approach to copyright' gives rise to the fundamental methodological starting point point for reconciling copyright and the right to freedom of expression [such as 'the principle of indivisibility and inseparability of human rights']. This principle is the firm rule to ensure an effectively balance of public interest in the free expression against the interests of copyright owners and conversely. Furthermore, this principle also serves as the background for settling the problem of reconciliation of such analyzed category of rights, that is, the real problem of law because one right is not seen as having more weight than other rights. This principle has been highlighted and elucidated in the current international law doctrine (Eide, 2007; Rehman, 2009; Winston, 2010).

"The indivisibility and interdependence of all human rights — civil, cultural, economic, political and social — are fundamental tenets of international human rights law, repeatedly reaffirmed, perhaps most notably at the 1993 World Conference on Human Rights. This has not

always been the case. Indeed, human rights advocates had to devote immense effort to achieve the normative and the practical recognition of the interdependence of rights. Indivisibility and interdependence are central principles of human rights, as is the inherent dignity of human being, participation and gender equity" (United Nations, 2005, p. 4). It could be regarded as an initial theoretical ground of mitigation the tensions between various international human rights, including tensions between copyright and the free expression. As it was to be expected, the implementation of this principle is a difficult problem. Noted by Sané (2007), "while the prioritization of one or other category of rights should have disappeared after 1993, this is unfortunately far from true" (p. 2). This same conclusion had been confirmed by Feyter and Pavlakos (2008). The balance-based approach to privacy has therefore been outlined in Clapham's (2007) work. In our opinion, the contradiction between copyright and the freedom of expression is a similar case.

From the perspective of the above stressed principle, the confrontation of IPRs and the freedom of expression, associated with the rights to free opinion and information, as well as other international human rights, raise long-standing issues regarding the connection between different generations of international human rights. The dilemma is to find the balance as a ground for sufficient realization of all internationally recognized human rights. The increasing relevance of their protection refers to such core guarantees, as the wide principle of balance in the international human rights system, whereas the differences between sets of rights, including political, civil, economic, social and cultural rights, are claimed. In conjunction with the said dilemma, the models of relation between copyright and the freedom of expression are determined by approaches having different insights into the status of these rights in the international system of human rights.

The current philosophical paradigm of international human rights law denies the acceptability of contradiction between internationally recognized rights, belonging to one or different sets of international human rights. The Vienna Conference in 1993 has defined the core principle of international human rights law, such as the above-noted principle of universal, interrelatedness, interdependence and indivisibility of human rights. Under para. 5 of part No 1 of the Vienna Declaration and Programme of Action endorsed by the Vienna Conference on human rights stated that, "while the significance of national and regional particularities and various historical, cultural and religious backgrounds must be borne in mind, it is the duty of States, regardless of their political, economic and cultural systems, to promote and protect all human rights and fundamental freedoms."

On the topic of tension between copyright and the freedom of expression, it should be mentioned that it is a tension within the international human rights system but having derivative character. Of course, there are some theoretical conditions to recognize copyright as one of the international human rights. Likewise, it is also relevant to the second generation of international rights (Torremans, 2004, p.5). However, the fact is certain, copyright is mainly protected and usually in practice under national, supranational and international instrument in the area of intellectual property. This coverage excludes the ICESCR or the ECHR aiming at protection of economic, social and cultural rights.

### Theme 3: Copyright through lens of the dichotomy 'idea – expression'

The human rights-based approach to solving the problem of reconciliation between the human right to freedom of expression and copyright may be justified by the information and expression aspects of copyrighted works. As it is evident, copyright directly relates to the freedom of expression and information that is founded in the context of the new methodological perspective. According to Sané (2007), "many human rights can be considered as multidimensional. The right to education could be qualified as a social and cultural right as well as civil right... The right to freedom of expression is certainly a civil and political right. However, it could also be considered as a cultural right?" (p. 2). Bearing in mind of this approach, it will be true to suggest that copyright – having aspects of information, intersects with information rights. Although these groups of rights [i.e. copyright and information rights], are related to different generations of human rights, namely; first and second accordingly, the intersection is obvious.

Within the scope of copyright, it should be noted that the creative results are more than that of information. Since it has such fundamental property such as creative self-expression of creator's individuality. Therefore, copyright deals with protection of expression of ideas or information

reaching necessary threshold of originality with regard to literary, artistic and musical works. Despite the fact that original creative works depict some level of expression [i.e. in-most depths of mind], they obviously have information aspects viewed through lens of the dichotomy 'idea – expression'. However, these aspects are of special nature. Because creative works are significant for both culture and society, and at the same time have certain economic worth, they ought to be disseminated and used in conformity with the legal order. In effect, their use should be grounded also on rules of intellectual property law like copyright. Consequently, this forms the basis for transforming the exclusive rights of the creators to copyright holders as legal monopoly in the area of using exploitation rights [reproduction, public communication, adaptation, translation and so on]. For example, it is generally known that copyright offers the exclusive rights - that can be transferred, to creators for a fixed number of years. The exercise of these rights offer them the privilege to control the over use of their works [namely to copy, print, record].

Traditionally, the copyright law has primarily dealt with the protection of the right of owners [be it creators or not], to exploit creative works economically. More so, the exclusive rights are concrete form of property rights protected by Article 1 of Protocol 1 of the ECHR. Contrarily, the exclusive rights due to copyright are significant to the culture of society and its economy. The right to use creative works by the public [that is the present heterogeneous commonality of interested users] is the same for culture and science or particular information having specificity amongst other information flows. In essence, artistic and literary works are unique examples of creative expressions in conjunction with the freedom of artistic and literary creativity, conferred by the ICESCR (art. 15.3).

Likewise, scientific researchers also have the right to self-expression in conformity with acknowledged right to the freedom of scientific research. Authorities, private persons or organizations are obliged not to encroach unduly on the freedom of artistic expressions and scientific researches. Making their works copyrighted, these creators do not only express their ideas, but also have the right to take part in the exchange of cultural and scientific information. At the same time, they enjoy the right to freedom of expression in general. They also have the right to take part in exchanging sociopolitical information and ideas of all kinds. In certain cases, they, being rights holders, have opportunity to control some information and expression flows. Accordingly, they act not only as creators, but also as key controllers of the information contained in their copyrighted works. Conforming to Bainbridge and Howell (2010), "copyright does not protect the idea but the independent expression of the idea... Copyright does not create monopolies. It is intended to prevent others from taking unfair advantage of a person's creative efforts for a defined period of time" (p. 3).

The provision of article 12, that is the "scope of copyright protection" within the "Copyright Treaty" of the World Intellectual Property Organization states that, copyright protection extends to expressions of authors and not to ideas, procedures, methods of operation or mathematical concepts as such. Accordingly, the expressions of authors' ideas are the protected objects. As Bainbridge (2010) further remarks, copyright is a means of exploiting works by the owner. The right to exploit is being conferred to another within special regimes of intellectual property protection. From this perspective, "copyright protects works. The owner of copyright initially the author of the work or her employer, has the exclusive right to use the work in ways" (p. 6).

However, authors do not have monopoly over information. They are monopolists in the sphere of its exploitation. Concurrently, public and users have the right to access ideas and their expression. This 'access-right' became an independent subject matter of intellectual property theory, having been applied to the digital environment (Efroni, 2011). Consequently, the free access to information in any form includes the free access to information contained in copyrighted works. This information is a condition of social and person development. Because ideas subsist to be used by public, the public is intrigued with ideas contained in copyrighted works. The concept of copyright typically means available access to copyrighted work on the basis of the respect for author's rights.

At any rate, copyright specifies the conditions of access to information contained in author's works as forms of author's expression. As Lenert (2014) stresses, copyright itself is an engine of the free expression. "By establishing a marketable right the use of one's expression, copyright supplies the economic incentive to create and disseminate ideas" (p. 38). Hence, copyright can be defined as both, the legal order of disseminating author's self-expression of individual ideas and as

the legal order of access to copyrighted works. Remarkably, access to creative copyrighted works is designed not only to the simple enjoining of public. Rather, it operates with the aim of finding additional means for one's own self-expression. In so doing, self-expression of users involves others' expressions of copyrighted works. We consider the right of free expression, opinion and information to be an integral part of the right to enjoy copyrighted results of science and culture. The freedom of expression should therefore respect copyright as a condition for a high level of democratic participation, cultural and scientific development.

The modern culture is aware of emerging art forms constructed by using original works [in derivative and transformed means]. Derivative and transformative works having economic dimension take certain place now in contemporary artistic and cultural expressions, benefiting and enriching the cultural diversity. These works, being spread widely due to digital technology and the Internet have become one of modifications of the freedom of expression - based on the use of original copyrighted content. In other words, new technologies facilitate one remarkable shift. This is the shift from users as a passive consumers of copyrighted content to active co-creators, increasingly involved in the cultural and knowledge creativity. This is an unprecedented situation influencing the new meaning of copyright in the context of achieving the new forms of balance between interests of creators of copyrighted works and creative users.

In fact, 'the fair use of copyrighted works and the fair remuneration of creators' are still difficult problems faced by authors and the general public. In essence, authors are interested in high level of protection of their exclusive rights and in their stronger enforcement. The public is however interested in use of protected works as broad as possible. In this sense, copyright and the freedom of expression are really antithetical. Copyright prevents all, except the copyright owners, from expressing protected information. In most cases, the problem with the use of author's works does not arise because there is a possibility to publish one's own works or to form one's own expressions based on other protected works, although not in same words. As pointed out by Lord M. R. Phillips [Britain Court of Appeal] regarding the case; 'Ashdown v. Telegraph Group Ltd (2001)', it is important that citizens should be free to express ideas and to convey information in the form of words of their choice. "While freedom of expression does not confer the freedom routinely to use a form of expression devised by someone else, there were circumstances when the freedom to do so is important. These circumstances might be rare, but, when they did occur, freedom of expression would come into conflict with copyright..." (Lenert, 2014, p.67).

We deem the conflict between the author's rights and the right to expression as situated at the conflict of different forms of expression. In light of extended expressions in the digital era, the scope of notion 'expression' needs to be adjusted within context of new technologies [especially, online platforms providing the capacity to express and to communicate infinitely at almost no cost]. Every creative work as an element of the Internet content could be regarded as a creator's expression. However, the Internet is filled with numerous expressions of users that are not copyrighted works. Only in this case, original approach of John Perry Barlow [famous activist of Electronic Frontier Foundation] is a true. He says, "I do not regard my expression as a form of property. Property is something that can be taken from me. If I do not have it, somebody else does. Expression is not like that. The notion that expression is like that is entirely a consequence of taking a system of expression and transporting it around, which was necessary before there was the Internet, which has the capacity to do this infinitely at almost no cost" (Anderson, 2011).

There are also conflated issues concerning copyright and free speech. These issues are the traditional way in which number of scientists go. It is noteworthy that free speech is not considered as a form of property. In contrast to that, no one considers one's own opinion or attitude as an object of intellectual property rights. Moreover, these opinions are placed in virtual space of the Internet. The expression is an object of the property rights only in some conditions. The property can be alienated [i.e. it is something that can be taken from us]. The expression occurring in communicative process within the cyberspace, unlike creative expression, have a tendency to promote the realization of moral and economic interests of copyright owners. The creative works are different; they contain monetary value.

## **Discussion**

The critical reflections on the reality of conflict between the two groups of rights and the future perspectives of their harmonization on basis of the fair and proper balance are, at least,

situated in numerous debates around the substance of copyright and information rights (Spence, 2007). Currently, the explored relationship between these two categories of rights forms an integral part of the intellectual property theory. This conclusion is grounded on the contemporary conception of IPRs. This reflects various shades of relations between IP and the right to information and expression (Colston, & Galloway, 2010; Dutfield, & Suthersanen, 2008).

In an attempt to regulate the digital environment, the freedom of expression has become the subject matter of information law. Therefore, connections between analyzed rights are immediately reflected in theories of legal regulation of information. These connections are also being reflected in the doctrine of information law because the copyright system is an essential part of the regulation of digital environment. Consequently, Murray (2010) endorsed a strict scrutiny, having investigated the issues on digital content and copyright, as well as copyright in the digital environment.

Looking at the future of copyright [in the digital and e-innovative environment] through lens of freedom of expression invokes the rethinking of its legal nature. This trend supplements the investigation of both protection and enforcement of copyright in the digital environment (Lemley, 1997; Stamatoudi, 2010). Indeed, traditionally, protection of IPRs was connected with defending books, movies and music. However, the digital reality of modern information society has become a vast and complete environment where author's rights are exercised now. Furthermore, dissemination and use of creative works take place now in the digital reality where they are subjected to digitization. This environment generates a renewed notion of copyright as, in a broad sense, protection of exclusive rights, or as the right to their protection.

We also fully agree that copyright on the Internet is a core part of digital copyright law (Elkin-Koren, 1988). This presumes a new form of the balanced relation between users' and author's interests in the context of the digital environment as the new communicative reality. The digital copyright law progressively intersects the information and intellectual property law. This is a new-minted legal innovation for the digital age. This innovation is accompanied by the appearance of new social norms and digital culture that resists the old copyright institutions. As a result, intellectual property theory, notably the theory of copyright, is generating a new justification of copyright for the digital age (Merges, 2011).

Eventually, the debated digital copyright law is an embodiment of the process of copyright digitization. We can also view therewith the advent of contextual concept of digitization of property. An interesting opinion on 'digital property' was expressed by Murray (2010). The approach concerning 'virtual property' in the digital environment was introduced by Primavera de Filippi (Filippi, 2009). We consider that these new trend in the doctrine of property rights are somewhat relevant for the digital era and will form the basis of a possible concept of digitization of IPRs, especially copyright. It could mean that, copyright is one of the digital rights actively connecting with other digital rights; for example, digitized right to free expression. However, such a perspective of development can be a lap of the future. At present, the relations between copyright and the right to freedom of expression is still being explored in a traditional manner, taking into account new conditions affecting their exercise in the digital environment.

The development of the digital environment is followed by the appearance of the problem of digital and digital-related rights' protection under national and international laws [particularly; international information law, international law of intellectual property and international human rights law]. Regarding the digitization of the right to expression and information, their association with copyright though indicate similar form of digital rights, they have two different legal properties. The first is the internationally recognized human right while the second is mainly the right of ownership which undoubtedly has a human right profile. Similarly, the legal doctrine is yet to be faced with the necessity to reconsider the information and expression rights at the digital stage of information society. This review should be done in the light of copyright evolution, with regard to the logic and trends in development of the digital environment.

#### **Conclusion**

In summary, the reality of information society exacts the revision of the dominance copyright as a concept. With the aim of reconciling the copyright system with the digital environment, both freedom of expression and the exclusive author's rights were reviewed in this study. However, we consider that revising the concept of copyright [both at theoretical and practical levels] should not

be conceived as a sort of private-proprietary rights. Conceptualizing copyright in a relational manner means that copyright system shares [not only potentially], a core value of the information society. Respectively, copyright has to be one of the guarantees underlying the freedom of expression at both national and international levels. In other words, the copyright legislation and appropriate policies should deal with fostering creative capacities of all participants to increase information flow and communication. Hence, copyright in the information society cannot be identified solely with the rights of rights' holders to control the citizens' expression using copyrighted works. In this case, tensions, becoming an obvious clash, are far from adequate resolution. The current paradigm of copyright can be ideated to be consistent with terms of the free communication and expression. In other words, the respect for the right to freedom of expression as the fundamental pillar of the democratic society, should reach a balance with copyright in the context of digital reality.

## **Acknowledgment**

The work is conducted according to the Order of Ministry of Education and Science of the Russian Federation for governmental works in the field of scientific activities. This is also done within the framework of the basic part of the governmental task No 2014/205 - "Problems of international legal policy and their influence on the national legislation".

#### **Conflicts of interest statement**

The authors declare that they do not have any conflict of interest.

## **References**

Anderson, N. (2011). *Copyfight EFF co-founder enters e-G8 "lion's den" rips into lions*. Retrieved on 12/6/2016 from: http://arstechnica.com/tech-policy/news/2011/05/eff-co-founder-enters-copyright-lion.

Bainbridge, D. (2010). *Intellectual Property (8th ed.)*. Harlow: Longman.

Bainbridge, D., & Howell, C. (2010). Law express: Intellectual property law (2nd ed.). London: Longman.

Baum, D. (2014). Freedom of expression. Toronto: Dundurn.

Benedek, W., & Ketteman, M. (2014). Freedom of expression and the internet. Strasburg: Council of Europe.

Chapman, A. (2001). Approaching intellectual property as a human rights: Obligations related to Article 15 (I) (c). *Copyright Bulletin*, *35*, 13-15.

Chapman, A. (2002). The Human Rights Implications of Intellectual Property Protection. *Journal of International Economic Law*, 5(4), 861-882.

Clapham, A. (2007). *Human rights: A very short introduction*. Oxford, New York: Oxford University Press.

Colston, C. & Galloway, J. (2010). *Modern intellectual property law (3rd ed.*). Abingdon: Routledge.

Council of Europe (2008). *Copyright and human rights: Report prepared by the group of specialists on human rights in the information society (MC-S-IS)*. Strasburg: Council of Europe.

Craig, C. (2011). Copyright, Communication and Culture: Towards a Relational Theory of Copyright Law. Cheltenham: Edward Elgar Publishing.

Croven, M. (1998). *The International Covenant on Economic, Social, and Cultural Rights: A perspective on its development.* Oxford: Oxford University Press.

Donnelly, J. (2003). *Universal Human Rights in Theory and Practice, 2nd ed.* New York: Cornell University Press.

Dowell-Jones, M. (2004). *Contextualising the International Covenant on Economic, Social and Cultural Rights: Assessing the economic deficit.* Leiden: Martinus Nijhoff Publishers.

Dutfield, G., & Suthersanen, U. (2008). *Global intellectual property*. Cheltenham, Northampton: Edward Elgar.

Efroni, Z. (2011). Access-right: The future of digital copyright law. Oxford: Oxford University Press.

Eide, A. (2007). Interdependence and indivisibility of human rights. In Y. Donders & V. Volodin (Eds.), *Human rights in education, science, and culture: Legal developments and challenges* (2nd ed.). Paris: UNESCO.

Elkin-Koren, N. (1988). Copyright in cyberspace – Rights without law? *Chicago – Kent L. Review*, 73, 101-144.

Feyter, K., & Pavlakos, G. (Eds.) (2008). The tension between group rights and human rights: A multidisciplinary approach. Oxford: Hart.

Filippi, P. (2009). Copyright in the digital environment: From intellectual property to virtual property? Retrieved on 2/6/2016 from:

http://www.virtualgoods.org/2009/79\_VirtualGoods2009Book.pdf.

Helfer, L. & Austin, G. (2011). *Human Rights and Intellectual Property. Mapping the Global Interface*. Cambridge: Cambridge University Press.

Helfer, L. (2007). Toward a Human Rights Framework for Intellectual Property. *UC Davis Law Review*, 40, 971-1038.

Lemley, M. (1997). Dealing with overlapping copyright on the internet. *University Dayton Law Review*, 22, 548-589.

Lenert, M. (2014). *The free flow of information: Media law and freedom of expression in the United States*. Raleigh: Lulu Press.

Merges, R. (2011). Justifying intellectual property. Cambridge, MA: Harvard University Press.

Murray, A. (2010). Information technology law: The law and society. Oxford: Oxford University Press.

Rehman, R. (2009). International Human Rights Law. Harlow: Logman.

Sané, P. (2007). Introduction. In Y. Donders & V. Volodin (Eds.), *Human rights in education, science, and culture: legal development and challenges*. Paris: UNESCO/Ashgate.

Sepúlveda, C. (2003). *The Nature of the obligations under the International Covenant on Economic, Social and Cultural Rights.* Antwerp: Intersentia.

Smith, R. (2007). *Textbook on International Human Rights* (3rd ed.). Oxford: Oxford University Press.

Ssennyonjo, M. (2010). Economic, social and cultural rights: An examination of state obligations. In S. Joseph & A. McBeth (Eds.), Research handbook on *international human rights law*. Cheltenham: Edward Elgar Publishing.

Stamatoudi, I. (2010). *Copyright enforcement and the internet*. The Netherland: Kluwer Law International.

Torremans, P. (2004). Copyright as a Human Rights. In P. Torremans (Ed.), *Copyright and human rights freedom – Intellectual property – privacy*. The Hague: Kluwer Law International.

United Nations (2005). *Economic, social and cultural rights. Handbook for National Human Rights Institutions.* Geneva: United Nations.

Voorhoof, D. (2015). Freedom of expression and the right to information: Implications for copyright". In G. Christophe (Ed.), *Research handbook on human rights and intellectual property*. Cheltenham: Edward Elgar Publishing.

Winston, M. (2010). Indivisibility and interdependence of human rights. *University of Nebraska Human Rights and Human Diversity Monograph*. Series 2:1. Lincoln: University of Nebraska.

Yu, P. (2007). Reconceptualizing Intellectual Property Interests in a Human Rights Framework. *UC Davis Law Review*, 40, 1039-1149.

Zeno-Zencovich, V. (2008). *Freedom of expression: A critical and comparative analysis*. Abington: Routledge.



Copyright © 2016 by KAD International All rights reserved.
Published in the Ghana

http://kadint.net/our-journal.html

RESEARCH ARTICLE



# Modern Textbooks and Prospects for Innovative Technologies: Effects on Teaching Foreign Languages in Ukraine

Olha Osova a, \*, Violetta Panchenko a

<sup>a</sup> Kharkiv Humanitarian Pedagogical Academy, Ukraine

<u>Paper Review Summary:</u> Received: 2016, September 11

Received in revised form: 2016, October 15

Acceptance: 2016, October 16

#### Abstract

The use of modern textbooks is currently affecting the growth and development of Ukrainian higher educational establishments. Keywords like; "teaching", "foreign languages", "textbook", "training manual", "electronic textbook", and "electronic training manual" were used to search for scientific pedagogical and methodological literature. The review shows a convergence tendency among the different kinds of educational publications and redistribution of their functions. The article indicates that the limits imposed by textbooks are indistinct due to their integration into other educational training manuals and publications [such as workbooks, reference books, reading books, dictionaries]. The advantages of multimedia means can be realized in full, only if the perception of new information is accompanied by different kinds of cognitive activities: from motor functions to inductive, logical and creative thinking. These goals can be achieved using the complex of exercises presented in the contents of the analyzed electronic textbooks.

**Keywords:** Electronic Textbook, Innovative Teaching Technologies, Textbook Methodological Functions, Textbook, Training Manual, Ukraine.

#### Introduction

Under the conditions of modernizing foreign language education, the problem of textbook is a crossing point. Improving the process of teaching foreign languages as the choice of methodologically appropriate and obligatory educational material for students, there is the need to define the best ways to present it, organize related educational activities, and develop students' educational interests. The topicality of the scientific and methodological problem of a foreign language textbook is conditioned by the fact that a textbook is an object which offers the real interaction between educational contents and the process of teaching of foreign language (Babelyuk, 2012).

The problem of using a foreign language textbook is widely discussed in scientific circles. Consequently, certain steps have been made in the sphere of teaching of foreign languages to address the goals, principles, and contents of teaching of foreign languages at advanced educational establishments (Balyikina, 2003; Koval'chuk, 2010). Having analyzed the current

E-mail addresses: osova\_olga@mail.ru (O. Osova), viola-zmyov@mail.ru (V. Panchenko)

<sup>\*</sup> Corresponding author

approaches to the composition of foreign language textbooks, we found out the real necessity for methodological innovations in the creation of foreign language textbooks. The analysis of modern foreign language textbooks for higher educational establishments sometimes fail take into consideration the peculiarities of teaching and learning. As a result, the relevance of the problem and the insufficient level of its theoretical and practical development predetermine the purpose of our research.

#### **Methods**

The authors used the following methods to complete this review:

- a) Analysis of psychological and pedagogical literature;
- b) Analysis of normative documents to define the aim, subject, tasks of the research;
- c) Analysis and generalization of psychological, management pedagogical, scientific and methodological literature to compare different views on the researched problem;
  - d) Classification of techniques; and
  - e) Analysis of personal experience.

## **Results**

## Printed textbooks and peculiarities of their usage

The process of teaching of foreign language is usually oriented to the realization of two methodological functions: 1) educational and 2) communicative. Hence, activities of class lessons which require speech situations can be regarded as a model of real communication. The textbook is known to be one of the means to teach speaking.

According to the regulatory and legal documents of The Ministry of Education and Science of Ukraine (2008), textbooks and training manuals are recognized to be the main books for students' educational activity. These are defined in the following ways:

- "a textbook is an educational publication that includes a systematic presentation of an academic discipline, corresponds to the discipline program and is officially approved as such kind of publication";
- "a training manual is an educational publication that partially or completely substitute or complement a textbook and is officially approved as such kind of publication" (p. 105).

This research shows that foreign language departments of Ukrainian higher pedagogical educational establishments widely used non-native methodological materials in addition to textbooks of British [Pearson Longman, MacMillan, Express Publishing, Oxford University Press etc.], German [Heuber, Langenscheidt, Cornelsen, Klett etc.], French [Cle International, Hachette etc.] publishing houses. These textbooks help to form students' foreign language communicative / professional competence. Their usage in the educational process at higher educational establishments is also approved by The Ministry of Education and Science of Ukraine till date.

Studies on professional competence, as well as functional, structural and component-typological analysis of foreign language textbooks stipulate the need for innovative educational techniques (Albrecht, 2009; Babelyuk, 2012; Clare, & Wilson, 2013; Dellar, & Walkley, 2012; Dumett, Stephenson, & Lansford, 2015; Dumett, & Stephenson, 2014; Evans, & Dooley, 2015; Jeffries, 2013; Paliy, 2008; Pellmann-Balme, 2004; Shcherban', & Kushneryk, 2004; Shevtsiv, & Shevtsiv, 2003; Vozna, Haponiv, & Akulova, 2004). These include;

- 1. Structuring. Each textbook must be strictly structured to include:
- a) introduction, which tells about the author or authors of the textbook and their scientific interests; confirms topicality of the publication; includes a short survey of the contents of the textbook structural parts;
- b) main body chapters, each of which is often clearly structured according to the purpose of writing [e.g. teaching material, mostly training texts, lexical and grammatical drills, references]
  - c) subchapters within chapters;
  - d) glossary:
  - e) list of references;
  - f) different appendices.
- 2. Early specialization. The necessity to stick to this rule is explained by Ukraine's efforts to integrate into European and world educational space and the labour market demands.

- 3. Scientific nature. This principle is mostly realized in textbooks and training manuals for the discipline - "Professionally Oriented Foreign Language". Through a deep analysis of the stated problems, interpretation of different conceptions is included in the glossaries of scientific definitions and terms.
- 4. Simplicity, which is achieved through the popularity of the style of educational material presentation.
- 5. Demonstrativeness. Textbooks must include a lot of visual aids for the educational material presentation, that is tables, schemes, diagrams, pictures and other illustrative matter. Key terms, notions and definitions should be in different colour, size or font, sometimes in box.
- 6. Profundity of contents. Authors have to get the gist of the researched problem and show its interdisciplinary connections.
- 7. Preference for communicative approach in the educational process, active and interactive teaching methods, which ensures higher students' motivation.
- 8. Usage of person-oriented approach, which enables students to satisfy their individual educational needs and realize their abilities.
  - 9. Formation of students' critical thinking and reflexive skills.
  - 10. Arranging of educational material according to the credit-modular system of education.
- 11. Opportunity for self-control and monitoring the level of students' knowledge and skills obtained after studying of a particular topic or module.
- 12. Integration of theory and practice, that is the contents of educational materials have to be oriented to practical application of the obtained knowledge and skills in students' further professional activities.

Thus, the contents of foreign language textbooks and training manuals have to be characterized by the prevalence of active and interactive teaching methods as they encourage students to participate in the educational process more actively in comparison to traditional methods. They are often directed to practical application of the obtained knowledge and skills; contribute to the realization of the principle of theory and practice integration in studying.

The usage of active and interactive teaching methods, following the principles of the communicative approach have to be characteristic features of textbooks and training manuals for the academic discipline - "Foreign Language". According to the foreign language curriculum for first-year students, it is required by educators to include vocabulary of daily routines, native language speakers' life and customs, guidelines for functional grammar structures as well as a set of lexico-grammatical exercises. A foreign language textbook or training manual is believed to be one of the main means to form students' foreign language communicative competence. The contents of a foreign language textbook should also help students address issues regarding geography, history, world literature etc. (Koval'chuk, 2010).

Besides, textbooks and training manuals on the academic disciplines "Foreign Language" and "Professionally Oriented Foreign Language" have to include the necessary number of methodological aids for students' self-work. This is necessary because approximately 50% of educational load is assigned to students' independent mastering. These methodological aids have to be directed to all kinds of educational activities.

In addition, the analysis of the textbooks by British, American and German authors published abroad testifies that they are more popular than native ones (Albrecht, 2009; Clare, & Wilson, 2013; Dellar, & Walkley, 2012; Dumett et al., 2015; Dumett, & Stephenson, 2014; Evans, & Dooley, 2015; Jeffries, 2013; Pellmann-Balme, 2004). From our analysis, learning materials follow these principles;

- the list of module topics corresponds to the curriculum;
- training texts include interesting information which encourages students to study;
- the prevalence of the communicatively-oriented approach, communicative strategies, direction to the usage of active and interactive teaching methods which significantly increase students' motivation;
  - there are a lot of language and speech models characteristic for everyday life;
  - there is always a teacher's book where we can find methodological tips for every lesson;
  - there are module and progress tests, so the teacher does not hate to compile them;

- the sets always include audio- and in most cases video-materials for every module topic which allows to form students' listening and perceptive skills;
- there is a set of methodological aids which allows students to perform all kinds of educational activities: reading, listening, writing, speaking and to form all constituent parts of their foreign language communicative and foreign language professional competences and competencies;
- there are a lot of appendices such as tables and schemes with lexical and grammatical material which is especially difficult for students;
  - they are attractively designed.

The absence of the listed quality characteristics in most native foreign language textbooks and training manuals on foreign languages do not allow higher educational establishments to achieve the main aim of teaching of foreign language – the formation of students' foreign language professional competence (Babelyuk, 2012; Paliy, 2008; Shcherban', & Kushneryk, 2004; Shevtsiv, & Shevtsiv, 2003; Vozna et al., 2004).

This study also found out that most of the native textbooks are of non-communicative character (Babelyuk, 2012; Paliy, 2008; Shcherban', & Kushneryk, 2004; Shevtsiv, & Shevtsiv, 2003; Vozna et al., 2004):

- they do not include problematic tasks;
- teaching reading and translating prevails;
- little attention is paid to dialogue skills;
- there are not enough exercises directed to the development of listening skills;
- there are not practically any illustrations, their functions are limited: photos, pictures, charts, diagrams illustrating socio-cultural situational context are insufficient or absent.

Having analyzed authentic sources which are used as additional materials for developing dialogue skills, we have drawn a conclusion that audio and visual aids should occupy one of the central places in a good textbook. It is noteworthy that, CD sets for listening and watching educational films foreign textbooks are more competitive and have more advantages in comparison to native educational courses at the market of informational technologies for the teaching of foreign language.

Although authentic foreign language textbooks and training manuals are communicativelyoriented, they do not take into account specific conditions of teaching of foreign language in Ukrainian higher educational establishments. Though they also cover all kinds of speech activities, sufficiently and properly illustrated with a wide range of innovative teaching methods, they again fail to consider difficulties of students to master a second foreign language after having Ukrainian as a mother tongue.

Consequently, the innovative aspects of foreign language textbooks didactic functions can be realized in the following way:

- introduction of straight-through students' project work. It is worth saying that this kind of educational activity requires the ability to search the Internet effectively using professional foreign sites and specialized vocabulary;
- giving examples of case studies and other problematic and situational tasks which model certain professional situations and students are expected to show the skills to take an appropriate professional decision and choose the correct verbal means to present it;
- audio and video supporting materials for every module topic to form students' perceptive skills;
- availability of interactive exercises to realize the communicative approach in teaching of foreign language;
  - opportunities for self- and peer control.

# Electronic textbooks and peculiarities of their usage

In the course of our research we have found out that the usage of electronic textbooks or etextbooks in the educational process provides wide opportunities for the realization of innovative technologies in teaching of foreign language at Ukrainian higher educational establishments.

As According to V. Fedorov, there have appeared more problems in the sphere of text reading and understanding during the last few decades. He explains it by the shifting of media priorities of the rising generations. Pupils and students used to read mostly paper texts but nowadays they mostly use 'media texts' in electronic formats. These are usually presented on TV or computer screens (Fedorov, 2007). Sociological surveys also indicate that modern schoolchildren and students are less interested in printed publications (Chudinova, Golubeva, & Mihaylova, 2004). It is now obvious that, information transfer facilities impact a lot on the formation and development of an individual's cognitive peculiarities. For instance, a printed text is characterized by such features like; linearity, coherence, subject matter, and rationality. These features form the type of thinking whose structure is similar to the structure of a printed text. On the other hand, visual information, which is characterized by a higher level of problem matter, requires more analysis, synthesis, thinking operations of rolling and unrolling. That is why visual educational information direct students to the search of system correlations and decisions (Titova, 2006). Modern young generation is better in perceiving audio-visual information than printed one, in English literature they are called "Generation Dot Com".

The researchers note a gradual change from the model of traditional teaching of foreign language to the wide range of activities with 'media texts' [mostly screened and audiovisual ones], which should be taken into account in planning the educational process. That is why electronic textbooks have widely been used alongside the traditional ones, as they provide great opportunities for the realization of innovative technologies in teaching of foreign language (Zhernovnykova, Osova, & Mishchenko, 2016).

It is worth mentioning that the term "electronic textbook" has not been unanimously approved by the scholars, many of whom consider it to be a slang expression that does not reflect the essence of the notion, which is more likely to be described by the terms "electronic educational aids", "pedagogical program aids", "software tools for educational purposes" or "programmethodological complexes" (Aleksyeyev, 2010). The other side of the problem is that even if the terms – "electronic textbook" and "electronic training manual" are generally accepted, there is not a common point of view as to the essence of these notions among teachers. Some researchers think that electronic textbooks and training manuals are not completely formed phenomena of modern culture. Thus, it is inappropriate to reflect their structure, functions, and creation mechanisms in the definitions. Arguably, it is better to treat them as simple textbooks and training manuals [but placed on a new material object] (Shvarkova, & Galyinskiy, 2006). Other researchers, on the contrary, believe that formal terminological transition from a printed educational book to an electronic one does not reflect revolutionary transformations that are caused by the progress of informational technologies (Aheev, & Drevs, 2003).

From this study, results show that there are three main approaches to the interpretation of the term "electronic textbook" in modern scientific literature. These include: 1) the approach which does not specify any strict demands to a textbook structure; 2) the structural approach; 3) the profound approach which specifies its additional characteristics (Levshyn, Prokhur, & Mukoviz, 2007).

This study shows that the terms "electronic textbook" and "electronic training manual" can be defined differently in terms of their contents and volume. The theory of an electronic textbook is more developed while researches devoted to electronic training manuals can rarely be found in scientific literature. As a rule, these terms are used as synonyms which makes their identification even more difficult. During the first attempts to introduce the term of an electronic (computer) textbook, its didactic mission was believed to be quite moderate. It was considered just as an asset to a printed one. Later the concept of a computer textbook is getting more complicated, it is interpreted as a program-methodological complex, which allows to master an academic course or its significant part independently. This combines the features of an ordinary textbook, a reference book, a problem book and a laboratory practice book (Honcharenko, 2011).

The perception of the essence and functions of the electronic textbook is changing with software development. It is becoming more popular to interpret it as a program-methodological complex which allows a person to master an academic course on a computer either independently or with the help of a teacher (Hristochevskiy, 2001). Special consideration should be paid to L. Zaynutdinova's definition according to which "electronic textbook is seen as a multi-purpose educational program system which ensures continuity and completeness of educational process

didactic cycle: provides theoretical material, training educational activities and control of the level of knowledge, information-searching activities, mathematical and imitational modeling with computer visualization, service functions under the conditions of interactive feedback" (Zaynutdinova, 1999). This definition was supported by a lot of researchers and is the basis of the definition of an electronic textbook in the "thesaurus of conceptual apparatus terms in education informatization" (Robert, & Lavina, 2009).

At the same time there has recently appeared a tendency in scientific researches to distinguish the terms "electronic textbook" and "electronic training manual". For instance, Vember (2006) indicates that most of educational programs are training manuals [that is, they are only additional educational aid], which are impossible to use instead of a traditional textbook. According to the researcher's point of view, electronic training manuals are reading books, reference books, workbooks, dictionaries, encyclopedias, electronic atlases, albums of maps and schemes, computer laboratory book, trainer books etc. (Vember, 2006). In the context of the researched problem, it is worth mentioning that electronic textbooks and training manuals are important means of the realization of innovative technologies in teaching of foreign language. They have the following considerable advantages in comparison to printed ones.

First of all, we can point to the new principle of educational material structure, the main features of which are multi-level presentation of the information, which is to be learnt, and uniting of different information arrays into one notional whole on the basis of associations. It allows students to form their own system of meaningful connections between different kinds of knowledge which encourages learning, not only facts but also cause-and-effect relations between corresponding informational units. It also enables them to study using their individual strategies and at the most comfortable pace (Hryzun, 2002).

The next advantage of an electronic textbook is the opportunity to realize active study approach. The usage of hypermedia computer technologies allows to combine traditional educational activities with new ones such as working with theoretical material on dynamic models, carrying out computer experiments, solving tasks in the interactive mode etc.

Motivation aspects of computerized learning are also quite important. So, one more advantage of an electronic textbook usage is the steady students' motivation or encouragement to have sustained cognitive interaction with an "electronic teacher". Interest is a means to stimulate cognitive activities; it helps to make learning attractive. One of the ways to get users interested is to allow them to set the format of material presentation on the screen independently or even to run the whole system, including the placement of text abstracts, illustrations, or to entirely configure screen interface.

The usage of multimedia means in electronic textbooks allows to enrich the educational process with high-quality visual illustration material: two- or three-dimensional, static or dynamic images, sound accompaniment of visual images and learner's actions. It determines one more considerable advantage of having an electronic hypertext textbook. This is supported by the fact that, audiovisual material presentation stimulates the conception and emotional memory in the system of perception and memorization. As a result, it significantly influences the formation of concepts which occupy the central place in imaginative and word-logical thinking.

One more positive feature of an electronic hypertext textbook is its ability to provide high-quality feedback due to the interactive properties of electronic textbooks and automatic system of knowledge testing. Consequently, there are conditions for effective students' self-education, self-control, self-correction, and average increase in cognitive activities. Thanks to statistical data accumulated by the diagnostic system, the teacher can analyze, correct and foresee educational process.

An electronic textbook is different from a printed one because of its integrity. Electronic textbooks unite different components of didactic means system: theoretical material, exercises for its training and acquisition; means to carry out a computer experiment; test tasks to check the quality of knowledge. On the other hand, electronic textbooks are quite naturally integrated educational resources presented in the electronic form, for example Internet resources. It creates opportunities for quick upgrade and modification of educational materials presented in the textbook, dynamic enrichment of their contents according to the modern scientific level.

The opportunity to organize natural interrelation of educational material with the help of hyperlinks is one more significant advantage of electronic textbooks. Their branched structure

allows to find additional information and quickly return to the original text. Hyperlinks help to move over the electronic textbook, to look through the pictures, to turn to other publications, even to write an e-mail to the author to ask him to clarify certain points (Nelson, 2008).

Electronic textbooks provide multi-variant, and multi-level diversity of checking tasks. Electronic textbooks give us an opportunity to present tasks in the interactive and educational mode. If a student's answer is incorrect, the correct answer with explanations and commentary is given. Electronic textbooks are more mobile because there is no typographical work on the stages of their creation and distribution. Electronic textbooks are structurally open systems which can be completed, corrected, and modified in the process of usage. Electronic textbooks availability is higher than that of printed publications. If the demand for them grows, it is easy to increase the number of copies and to spread them through the Internet.

Electronic textbooks differ in their structure to assure multifunctional usage and according to the purposes of their design. Electronic textbooks can be used for self-work, preparation for exams, and the purpose of studying for an external degree (Sapryikina, 2003). The analysis of the peculiarities of electronic textbooks and training manuals shows their contents correspond thematically to the contents of paper textbooks of the same level in accordance with European language standards but cannot be treated as absolutely identical. They are divided into theme modules, which in their turn are subdivided into micromodules in accordance with the lessons in the printed textbook. Language material of each module in the electronic textbook coincides with the language material of the corresponding printed publication. Such approach allows to use them either independently or in complex with the main textbook and workbook.

The researched foreign language textbooks fully accumulate all the functions characteristic for other educational tools. When we work with a printed book, the main role is played by the visual analyser. When we listen to an audio recording, an auditory analyzer is in priority, whereas an electronic textbook provides students with such educational activities that set in motion different analyzers to learn educational material more effectively. Thus, pilot testing of the text memorization effectiveness indicated that 25% of information is memorized with the help of optic canal, 15% using ear canal, and a combination of these two ways of information access having the index of 65% (Titova, 2006). This factor confirms the advantages of electronic textbooks. On the other hand, researchers claim that it is difficult to work with an ordinary linear text on the computer even if accompanied by a video and a sound. That is why, according to their point of view, text component in the contents of an electronic textbook should be limited, while audiovisual materials should prevail and serve as the main information medium (Balyikina, 2003; Sokolovs'ka, 2008). Methodological effectiveness of electronic educational publications is achieved through imaginative perception and emotional influence on students with the help of audiovisual material which alternates with interactive exercises.

It is worth mentioning that the advantages of multimedia means can be realized in full if only the perception of new information is accompanied by different kinds of cognitive activities: from motor functions to inductive, logical and creative thinking. These aims can be achieved using the complex of exercises presented in the contents of the analyzed electronic textbooks. The choice of the computer software is predetermined by the educational goals. One of the principles of electronic textbooks design is the priority of communicative goals which means the formation of user's foreign language skills in both oral and written forms (Red'ko, Karp, & Kokhan, 2006), that is why most of the exercises and tasks in electronic textbooks are communicatively oriented.

There are dictionaries in electronic textbooks like in paper ones, and students can use them in case of necessity. Also, the necessity to use programmed educational aids is related to one more advantage which computer technologies suggest. This merit is realized in the contents of foreign language-native-electronic-educational methodological complexes. Thus, O. N. Krilova mentions that modern educational book cannot include full-fledged functional unit of material learning organization in a single paper copy of a textbook which needs permanent update according to new requirements. She claims that only electronic educational publications, or workbooks can effectively fulfill this objective. Consequently, she suggests treating material learning organization not only as an element of a textbook, but also as a crucial element of an educational methodological complex for a certain academic discipline studying (Krilova, 2005).

#### **Discussion**

In studying the concept of textbook, the terms "textbook" and "training manual" are clearly differentiated. Textbooks are regarded as the main didactic means that ensure educational and teaching activities present an academic discipline in a systematic and fundamental approach, while training manuals provide students' with more specific knowledge and contribute to their better mastering of concepts. A training manual may not cover the whole discipline, but one or two chapters of an educational program. It is created faster than a textbook, that is why they can include newer, and more up-to-date materials. These materials are not only generally approved and accepted statements, but also debatable questions (Antonova, 2001).

Modern researchers are observing the tendency of convergence of different kinds of educational publications and redistribution of their functions. In Hutorskoy's opinion, the limits of a textbook appear to be indistinct due to its integration into other educational training manuals and publications such as workbooks, reference books, reading books, and dictionaries (Hutorskoy, 2005).

A foreign language textbook (training manual) functions as one of the main instruments for the realization of innovative techniques in the teaching of the particular language. It reflects conceptual points of the educational system. It is also based on the methodological grounds tested in teaching of foreign language and provides a purposeful and at the same time, a flexible management of the educational process (Red'ko, 2010).

In our opinion, the multiple-aspect approach to the definition of electronic textbooks and training manuals deserves more attention. On the one hand, they are educational publications, that is why they should be classified according to the typology of educational publications. On the other hand, they are electronic publications, so they should be interpreted in terms of definitions for electronic publications. We want to stress that some researchers believe that structurally, an electronic textbook is close to a paper textbook, but in terms of user's opportunities, it is similar to electronic educational resource (Hurzhiy, & Kartashova, 2014). We also agree with the scholars (Levshyn et al., 2007), that while creating electronic textbooks and training manuals we should not only work out their educational functions, but also take into account all groundwork of the theory and practice of traditional textbook creation.

In Ukraine, the terminology of electronic educational publications is not standardized. We agree to Balalayeva (2013) who defines the terms "electronic training manual" and "electronic educational training manual" indirectly using the generic term for an electronic publication. This includes a general definition of the characteristics of educational publications and as a specific feature – its ability to ensure the completeness of the didactic cycle. So, in our research, we suggest using the following definitions: "an electronic training manual is an electronic publication stored on digital media or in the computer network intended for helping in either training activities or mastering an academic discipline which ensures the realization of certain parts of the didactic cycle [theoretical material presentation, organization of knowledge application, skills formation, control] using informational technologies and which cannot be transformed into a paper analogue without losing its didactic properties".

Electronic educational training manual is an electronic publication stored on digital media or in the computer network which either complements or partially (completely) substitutes a textbook in the process of presentation of educational material on a certain academic discipline, ensures the realization of all parts of the didactic cycle using informational technologies and which cannot be transformed into a paper analogue without losing its didactic properties (Balalayeva, 2013).

In the context of the researched problem it is worth mentioning that currently the problem of creation and usage of high-quality foreign language textbooks in Ukrainian higher pedagogical educational establishments remains open. The question of methodological grounds and preconditions for the creation of foreign language electronic textbooks is animatedly discussed on the pages of periodical press and in the scientific circles (Sekret, 2009a; Sekret, 2009b).

As our research shows most of the earliest electronic educational publications were just electronic copies of printed publications and mostly did not take into account innovative computer opportunities of presenting material. However, considerable attention has lately been paid to the development of electronic textbooks which can be treated as an effort to make a serious step in solving the problem of the realization of innovative technologies in teaching of foreign language.

#### Conclusion

To sum up, we can mention that methodologically appropriate usage of innovation in textbooks is one of the most important conditions of effective foreign language learning. We have found out that electronic educational facilities have more advantages than printed ones:

- they allow to learn a foreign language faster and make access to information easier;
- educational material can always be updated; the volume and complexity of information is regulated according to the objectives of the lesson and the level of students' preparation;
- they acquaint students with a lot of linguistic-cultural material including elements of other nations' culture.

Listing the advantages of electronic educational and methodological support materials for innovative technologies in the teaching of foreign language, we should mention the opportunity to realize individual approach to every student. In addition, the availability of feedback, opportunity to present language material with the help of visual aids, and objective assessment of students' progress cannot be unassuming. Scientists have proved that multimedia materials and computer networks cut learning time three times, at the same time the memorization level increases by 30–40 % [due to simultaneous usage of images, sound and text] (Neuman, 2005; Reiner, 2001; Reinhard, 2000).

However, the practice shows that the problem of 'electronic educational complexes' creation and usage has still not been solved entirely. There are several reasons for it:

- higher educational establishments have not got enough affordable quality computer technologies;
  - lack of licensed software;
  - teachers are not ready to use electronic educational facilities:
  - impossibility to adapt available electronic educational facilities to suit teacher's needs;
  - weak awareness of educational establishments in the sphere of educational software; and
- unavailability of methodological, didactic, and pedagogical description of the available electronic educational facilities.

The findings of this current research is not fully exhaustive in providing answers to the research problem. Further investigations are necessary to clarify the questions of technological equipment renewal and updating of the process of teaching of foreign language in higher educational pedagogical establishment. More so, future studies are needed to investigate into the preparation of future specialists in terms of higher education integration in the European educational space and the comparison of native and foreign methodologists' experience in using innovative technologies professional activity.

### **Conflicts of interest statement**

The authors declare that they do not have any conflict of interest.

## **References:**

Aheev, V. N., & Drevs, Yu. H. (2003). *Electronic publications for educational purposes:* conceptions, creation, usage: Teaching manual for higher educational establishments. Moscow: MGUP.

Albrecht, U. (2009). *Passwort Deutsch. Kurs- und Übungsbuch*. Stuttgart: Klett.

Aleksyeyev, O. M. (2010). Peculiar classificatory features of electronic educational publications for engineer specialties. *Scientific periodical of National Pedagogical Dragomanov University*. *Series* 2. *Computer-Oriented Educational Systems*, 8(15), 129–134.

Antonova, S. H. (2001). *Modern educational book. Creation of educational literature of modern generation*. Moscow: Izdatelskiy servis.

Babelyuk, O. A. (2012). Practice of oral and written English speech: Phrasal verbs and synonyms. Part 1. Vinnytsya: NOVA KNYHA.

Balalayeva, O. Yu. (2013). Classifications of electronic educational tools arranged using hierarchical method. *Humanitarian bulletin of Pereyaslav-Khmel'nyts'kyy State Pedagogical University named after Hryhoriy Skovoroda. Supplement 1 to Issue 31. Vol. IX: Theme Issue «Ukrainian Higher Education in terms of integration in the European educational space»*, 137–145.

Balyikina, E. N. (2003). *Meaningful characteristics of electronic educational publications* (on the example of socio-humanitarian disciplines). The Circle of Ideas: Electronic resources of historical computer studies. Paper presented at Proceedings of the VIII conference of the Association «History and computer», 521–585.

Clare, A., & Wilson. J. J. (2013). *Speakout: Advanced Student's book with Active Book (+CD-ROM)*. Pearson Longman.

Chudinova, V. P., Golubeva, E. I., & Mihaylova, A. I. (2004). *Children and libraries in the changing world*. Moscow: Shkolnaya biblioteka.

Dellar, H., & Walkley, A. (2012). Outcomes Advanced Student's Book. Cengage Learning EMEA.

Dumett, P., Stephenson, H., & Lansford, L. (2015). *Keynote Proficient: Student's Book*. National Geographic Learning.

Dumett, P., & Stephenson, H. (2014). *Life Advanced: Student's Book*. National Geographic Learning.

Evans, V., & Dooley, J. (2015). *Upstream Proficiency C2 Revised Edition: Student's Book*. Express Publishing.

Fedorov, A. V. (2007). Development of students' mediacompetence and critical thinking in higher educational pedagogical establishments. Moscow: MOO VPP UNESCO "Informatization for everybody".

Honcharenko, S. U. (2011). *Ukrainian pedagogical encyclopedia dictionary*. Rivne: Volyns'ki oberehy.

Hristochevskiy, S. A. (2001). Electronic textbook – current state. *Computer tools in education*, *6*, 3–10.

Hryzun, L. E. (2002). Didactic bases of a modern electronic textbook creation: abstract of the Candidate of Pedagogical Sciences Thesis: Specialty 13.00.09. Kharkiv.

Hurzhiy, A. M., & Kartashova, L. A. (2014). Electronic training manual: An innovative teaching tool in the system of professional education. *Modern informational technologies and innovative teaching techniques in specialists' preparation: methodology, theory, experience, problems, 37.* Retrieved from http://nbuv.gov.ua/UJRN/Sitimn\_2014\_37\_4.

Hutorskoy, A. V. (2005). The place of a textbook in the didactic system. *Pedagogy*, *4*, 10–18. Jeffries, A. (2013). *Global Advanced: Coursebook*. Macmillan.

Koval'chuk, O. S. (2010). *Technologies of foreign language learning for the realization of multicultural education ideas*. Retrieved on

10/01/2010 from: http://www.nbuv.gov.ua/portal/natural/Nvuu/Ped/2008\_14/kovalchuk.pdf..

Krilova, O. N. (2005). Modern approaches to the development of university textbooks. *Philosophical age. Literary Miscellany*, 29(2), 235-243.

Levshyn, M., Prokhur, Yu., & Mukoviz, O. (2007). Electronic textbook in the system of scientific-methodological materials in higher educational establishment. *Higher Education of Ukraine*, 1, 60–67.

The Ministry of Education and Science of Ukraine (2008). *Methodological recommendations* for the structure, contents and volume of textbooks and training manuals for higher educational establishments. Supplement 1 to the Law of Ministry of Education and Science of Ukraine «Publication of Educational Literature for High School»  $N^0$  588 from 27.06.2008. K: Vyshcha shkola,  $N^0$  8, 105–109.

Nelson, M. R. (2008). E-Books in higher education: Nearing the end of the era of hype? *EDUCAUSE Review*, 43, 2, 40-56.

Neuman, G. (2005). Sieben Schritte zum erfolgreichen Lesen. Retrieved from http://www.Medienportal.Bayern.de.

Paliy, O. A. (2008). Training manual on German practical grammar. The Noun. The Adjective. Nizhyn.

Pellmann-Balme, M. E. (2004). Brückenkurs. Hamburg: Hueber.

Robert, I. V., & Lavina, T. A. (2009). *Thesaurus of conceptual apparatus terms in education informatization*. Moscow: IIO RAO.

Red'ko, V. H. (2010). About the problem of the modern school foreign language textbook. Retrieved from http://bibl.kma.mk.ua/pdf/zbirnuku/11/1.pdf on 12 January 2010.

Red'ko, V. H., Karp, S. I., & Kokhan, O. V. (2006). Didactic and methodological principles of the formation of contents of electronic scientific methodological complexes on foreign languages. *Problems of Modern Textbook*, 6, 51-56.

Reiner, K. (2001). Developing A Resourse Base For Selfdirected Computer Assisted Language Learning (CALL). Kommunikative Fremdsprachendidaktik: Theorie und Praxis in Deutsch als Fremdsprache: Festschrift für G.Neuner zum 60.Geburtstag/ hrsg von Hermann Funk und M.Koenig. München: ludicium, 265-275.

Reinhard, D. (2000). *Statt eines Vorwortes: Schreiben am PC im Fremdsprachenunterricht*. *Kreative Textarbeit mit dem PC*: Stuttgart: Ernst Klett Verlag, 5-6.

Sapryikina, G. A. (2003). *Electronic textbook is a modern educational tool*. Retrieved from http://www.websib.ru/ites/2003/06-01.htm

Sekret, I. V. (2009a). Methodological bases of an electronic textbook creation. *Scientific bulletin of South Ukrainian State Pedagogical University named after K. D. Ushynsky: collection of scientific works*, 1–2, 278–286.

Sekret, I. V. (2009b). *Methodological preconditions of elaboration of an electronic textbook on the professionally-oriented foreign language*. Proceedings from the Ukrainian scientific-methodological conference «Innovative processes and technologies at a modern university». Vol 3, Donetsk, Ukraine, April, 22, 2009. Donetsk, 157–160.

Shcherban' N. P., & Kushneryk V. I. (2004). *Practical course of the German language:* training manual. Chernivtsi: Knyhy – XXI.

Shevtsiv, H. M., & Shevtsiv, R. B. (2003). *SPRICH DEUTSCH*. Training manual on oral and written speech for the first- and second-year students of the Romance-Germanic faculty (the German language as the second specialty). Drohobych: Kolo.

Shvarkova, G. G., Galyinskiy, V. M. (2006). *Modern interpretation of an electronic textbook. Typology, necessary structural elements.* Proceedings of the International Scientific Conference «Informatization of Mathematics and Computer Studies education: pedagogical aspects» Minsk, 25-28 October 2006. Minsk: BGU, 479–484.

Sokolovs'ka, T. P. (2008). Innovative electronic educational and methodological complexes as the means of traditional educational system modification. *Problems of Modern Textbook.* 8, 42-47.

Titova, S. V. (2006). The problem of appropriate information visualization in teaching foreign languages: methodological recommendations. *Bulletin of Moscow University*. *Series 19*. *Linguistics and intercultural communication*, *3*, 14-23.

Vember, V. P. (2006). Educational and methodological requirements for an electronic textbook. *Computer-oriented educational systems*, *4*(11), 50-56.

Vozna, M., Haponiv, A., & Akulova, O. (2004). *English for translators and philologists*. Vinnytsya: NOVA KNYHA.

Zaynutdinova, L. H. (1999). *Creation and usage of electronic textbooks on the example of general technical disciplines: monograph.* Astrahan: TsNTEP.

Zhernovnykova, O., Osova, O., & Mishchenko, O. (2016). Innovative forms of educational activities and contemporary teacher training in Ukraine and Germany: comparative analysis. *Journal of Advocacy, Research and Education*, 3(2), 79-86.



Copyright © 2016 by KAD International All rights reserved.
Published in the Ghana

http://kadint.net/our-journal.html

RESEARCH ARTICLE



## **Cloud Services in Educational Settings: A Must for Future Nursing Training**

Oksana Zhernovnykova a, \*, Nataliya Yuhno a

<sup>a</sup> Kharkiv National Pedagogical University, Ukraine

<u>Paper Review Summary:</u> Received: 2016, October 30

Received in revised form: 2016, November 03

Acceptance: 2016, November 04

#### **Abstract**

This paper presents research directions from both domestic and foreign scientists regarding the preparation of future nurses to work with cloud services. It also suggests possible ways of implementing these services in their future professional activities. Results from this paper constructively discusses the technical integration challenges of cloud environments with existing systems. It also explores in details, the performance of cloud services and the benefits of their use in modern medicine. This paper has implications for health, cloud services and software engineering.

**Keywords:** Cloud Services, Cloud, Nurse, Professional Activity, Training.

#### Introduction

Globally, each passing day increases the role of the cloud technologies. The advantages of using cloud services are very significant within contemporary higher educational institutions. Cloud services offer new approaches in the organization of the educational process, educational technology, provision of academic mobility, the full availability to developing educational content, communication and collaboration of teachers with students. Recently, there has been an increase in the interest of the teaching community about the changing learning environment. This is due to the fact that, they make education more affordable, mobile, providing a common and continuous access for all participants in the educational process to gain educational resources. Cloud computing services may be understood as a dynamically scalable way to enable an individual's computer to access other external information resources through the internet. In effect, data within this capacity are processed using remote network servers as the computer user simply interact with data. The network of interconnected remote servers is the purported "cloud" (Zhernovnikova, 2014; Zhernovnikova, 2015).

The feasibility and necessity of introducing ICT-based on the cloud technology in Ukraine began at the state level. This was reflected in the national project - "An Open WORLD" (2010-2014)

E-mail addresses: chornousoxana@i.ua (O. Zhernovnykova), yukhno.natalya@mail.ru (N. Yuhno)

<sup>\*</sup> Corresponding author

and also central to "the strategy in the development of an information society in the Ukraine, between 2013-2020" [this provides the formation of modern information infrastructure that is based on the cloud technology]. The XXI Century requires from contemporary students, the ability to rethink their own system of professional knowledge and skills. This expectation takes into account the achievements of new educational technologies which are particularly important to their critical thinking skills [i.e. the use of cognitive techniques and strategies that increase the likelihood of obtaining the desired end result] (Hlazunova, 2014).

This trend leads researchers to study theoretical and methodological strategies / models for efficient use of cloud technology in modern educational process among both Ukrainian and foreign researchers. Though several work have been done on the use of cloud technologies in education in general, little is attention has been offered to the scope of training future nurses to work with cloud services. The purpose of the article is to explore how future nurses can be trained to work with cloud services.

#### **Methods**

The study was conducted as part of a comprehensive program at the Research Department for Theory and Methodology of Professional Education, Kharkiv National Pedagogical University [named after G. S. Skovorody].

The theme of this program was titled; "Improving the Effectiveness of the Educational Process in Secondary and Higher Education" [*LC number 200199004104*]. During the study the following methods were used:

- 1. Theoretical analysis of the sources of problems;
- 2. Examination of electronic educational resources;
- 3. Synthesis and evaluation of the results.

#### **Results**

## Evidence from Ukraine

In the information world, almost anyone can access the internet, especially with the development of mobile tablets and a large number of other similar devices. Currently, developing a new world of information technology has a need for new models. This will provide continuous access to data using various modern information and communication technologies [*ICT*]. These changes greatly affect our daily lives and to prepare future nurse in particular.

Currently, technological challenges facing hospitals include few workers with service IT infrastructure, high financial burden for the promotion of computer technology park, the impossibility of rapid software updates and little support for information security in accordance with local requirements. The operation of cloud services need to use the internet and service providers such as Amazon, EMC, Google, IBM, Rackspace, Savvis, Verizon or Microsoft (Butler, 2013). Among health workers, the greatest popularity of cloud computing services however includes; Google Apps, Google Maps, Gmail, Google Docs, Amazon and Office 365 (Chen, n.d.; Leonov, 2012; Sidorova, n.d.).

The analysis of previous studies show that domestic scientists are doing a lot to implement cloud technologies in the educational system of Ukrainian universities. Their attention is mainly focused on how the use of cloud computing technologies affect the approaches, principles, and models establishing the information-educational environment of higher education. Consequently, the continuous improvement of information technology gives reason to assert that the information-educational environment, which operates in many universities, does not provide all the necessary range of educational services (Hlazunova, 2014).

Some groups differentiate research opportunities for the application of cloud technologies in professional educational activities. According to some studies, powerful technologies such as "cloud computing" that supports traditional forms of education is a new step in the development of education and cost-effective, efficient and flexible way to meet the needs of learners in acquiring new knowledge (Arkhipova, & Zaytseva, 2013; Lotyuk, 2013).

The key issues in the work of leading scientists on the use of cloud services and platforms in the educational process always give recognition to how to organize quality training of future specialists (Arkhipova, & Zaytseva, 2013). Specifically, the results of these investigations present the characteristics of online services based on cloud computing, e.g. providing Google Apps

Education Edition (Leonov, 2012). In addition, they describe examples of cloud platforms [e.g. *Google Apps Education Edition and Microsoft Live@edu education*]. They also offer the scheme of interaction between teachers and students in the cloud. These open opportunities include cloud storage [e.g. *Microsoft SkyDrive and Apple iCloud*], cloud services [e.g. *gantter, SageMath Cloud, "1C" and "BuhSoft"*].

To build a system of training students in their study subjects, a private cloud offers the university a space to place electronic textbooks [e.g. theoretical material and applied problems]. via a computer system called Moodle (Lotyuk, 2013). Based on the analysis, we note that the use of cloud technology in the preparation of future nurses will provide an opportunity to shape the future of education and form a mobile network with patients too. A detailed analysis of the concept of "cloud-oriented learning environment" shows its components, objects, technological support and the level of interaction within its environment (Svyrydenko, 2012).

On the prospects of using cloud services like Microsoft Office 365, Svyrydenko (2012) used it to design the educational process for high schools. According to her, learning is not limited to walls. Hence, working with educational materials is possible from any location or device with access to the internet; contributing to its transformation and availability. The science and technology for designing information space based on Microsoft Office 365 to improve the quality of education and infrastructure optimization strategies is applicable to the effective training of future nurses to the profession. An example of practical implementation of clouds for formation of remote monitoring among graduates was done among medical schools in Ukraine using ICT skills in practice. A teacher survey was organized afterwards with the use of a specially designed portal (www: //testpovider.com - an example of a hybrid cloud) created on Windows Azur (Khmil', 2015; Morze, & Kuz'mins'ka, 2011). This technology provides a quality solution to the problem of informatization' of high school in the presence of minimal material resources. The most appropriate part of this technology is the use of Google services. The use of cloud computing encourages students to advance towards the development of IT-technologies, creating in them a high information culture, based on their interest in the World Wide Web.

On the possibility of using cloud technologies in the development of logical thinking and memory of nursing students, the TouchDevelop is very vital. This technology uses electronic educational resources [games] in the form of Mind Stick to enhance attention span. Professional nursing teachers can organize "virtual teachers' room", "virtual instructional design", "subject virtual communities" using Microsoft Office 365. This can help the form associations to deal with issues regarding methodology in higher education.

## Evidence from foreign countries

Several examples of the use of cloud services are evident in several countries. The Czech Republic-based Office 365 for example, is a web portal designed for learning. Teachers using this network form "partnership in education" to develop joint programs for cooperation with innovative universities. The cloud service Office 365 portal offers online and off-line courses, in addition to webinars for all schools in the Czech Republic. The portal allows foreign registration and publication of information, monitors the status and end the course. Despite this, each school has its own innovative sub-site, which publishes educational materials (www.icstic.cz).

In Hobart [Australia], high school learning environment is created through Facebook, Twitter, Google Apps, Hotmail and Gmail. This enables students receive counseling tasks for independent study and other information. Teachers placed objectives and class agenda online for their class. Additionally, students can see the recording sessions at any time and enhance their knowledge.

Despite this, the teaching personnel together with students participate in discussions and dialogues with the use of the media using this interactive platform of online learning with instant feedback. A useful tool is the "electronic portfolio", which contain details of student participation in different types of educational activities throughout the year. Activities such as active participation in debates about the data displayed in the blog, etc. (Sidorova, n.d.).

Israel for example, implemented a cloud-oriented learning environment called "TeacherTube". This was modeled after the YouTube to offer participant students studying at home, the ability to use video services (http://www.teachertube.com). Cloud computing is a relatively new concept aimed at the future development and delivery of computer resources to

primary and basic education in South Africa, especially in schools most affected by the digital divide. The sponsors believe that teachers and students in South Africa have the necessary technology and skills to bridge the digital divide in high school. The project will set the vector of development for the rest of the African continent (Le Roux, & Evans, 2011).

Cloud computing is used largely for organizing online training. One of the first examples of cloud computing in education was the creation of Khan Academy-YouTube videos to explore various disciplines. Using YouTube as a service, Khan Academy does not have to worry about the design, hosting or supporting video servers. Consequently, more emphases should be placed on educational content. Lacking the necessary funds to pay for infrastructure and working professionals to maintain video servers, schools instead may offer tutorials and educational materials created for charge. As noted by David Egts, chief architect of the state sector of the American IT company «RED HAT» [NC, USA], the education development accelerated open cloud computing is an important part in the evolution of online learning (go.nmc.org/Accel). In Egypt, the Ministry of Education recently began deploying Office365 for 1.7 million students and implemented communication and cooperation on a new platform. Office365 was chosen as a long-term holistic solution that can provide economic, efficient platform for distance learning to cover 470 learning establishments in Egypt (www.pill-network.com).

#### Conclusion

The article examines various cloud service providers that can be useful for the preparation of future nurses. Google, and Microsoft are widely used worldwide for educational purposes to meet common and different educational, and developmental needs of students in higher education. Previous studies in the area suggest the following relevant issues; (a) the formation of a cloud-based learning [information-educational, academic, educational, scientific-educational] at institutions of higher education to study various subjects; (b) organization of students through virtual communities by means of cloud services [e.g. Microsoft Office 365] to enhance the professional activities of health workers; and (c) the use of cloud services platforms and during the training sessions of future nurses to ensure quality training. The use of cloud services makes significant investments through the; (a) procurement and systematic updating of software, (b) process of computer equipment fleet updates, and (c) energy saving capacities. Cloud services allow teachers to conduct classes by means of new innovative forms. At the reaper time, these technologies require further study and clarification.

#### **Conflicts of interest statement**

The authors declare that they do not have any conflict of interest.

#### **References:**

Arkhipova, T. L., & Zaytseva, T. V. (2013). *Vykorystannya «khmarnykh obchyslen'» u vyshchiy shkoli. Informatsiyni tekhnolohiyi v osviti*: zb. nauk. pr. Vyp. 17. M-vo osvity i nauky Ukrayiny, Khersons'kyy derzh. un-t; redkol. O. V. Spivakovs'kyy [ta in.]. – Kherson: [b. v.], 99-108. Rezhym dostupu: http::ite.kspu.edu/issue-17/p-99-108.

Butler, B. (2013). *The cloud goes global: Amazon, Google, Rackspace, Microsoft, Savvis all expand international footprints*. Brandon Butler: Networkworld. Available from: http::www.networkworld.com/news/2013/052913-cloud-global-270246.html

Chen, G. (n.d.). Head in the Clouds: Why public schools are embracing cloud computing. Available from: http:://www.publicschoolreview.com/articles/218

Hlazunova, O. H. (2014). *Pryntsypы formyrovanyya* «Akademycheskoho oblaka» sovremennoho unyversyteta na osnove otkrытыкh prohrammnыкh platform. Informatsiyni tekhnolohiyi i zasoby navchannya: elektronne fakhove vydannya, 43(5) 174 – 188. – Rezhym dostupu: http://journal.iitta.gov.ua/index.php/itlt/article/view/1096/832#.VGjZmDSsXdM.

Khmil', N. A. (2015). Vidobrazhennya problemy vprovadzhennya khmarnykh tekhnolohiy u suchasnyy osvitniy protses na storinkakh vitchyznyanykh periodychny kh fakhovykh vydan'. Pedahohika ta psykholohiya: zbirnyk naukovykh prats' / za zah. red. akad. I.F. Prokopenka, prof. S.T. Zolotukhinoyi. – Kh.: «Smuhasta typohrafiya», Vyp.51, 103–114.

Le Roux, C. J. B., & Evans, N. (2011). Can cloud computing bridge the digital divide in South African secondary education? *Information Development*, *27*(2), 109–116.

Leonov, V. (2012). *Google Docs, Windows Live and other cloud technologies*. V. Leonov. M.: Eksmo.

Leonov, V. (2012). Google Docs, Windows Live and other cloud technologies. V. Leonov. M.: Eksmo.

Lotyuk, Yu. H. (2013). *Khmarni tekhnolohiyi u navchal'nomu protsesi VNZ*. Psykholohopedahohichni osnovy humanizatsiyi navchal'no-vykhovnoho protsesu v shkoli ta VNZ. Vyp. 1, 61 – 67.

Morze, N., & Kuz'mins'ka, O. (2011). *Pedahohichni aspekty vykorystannya khmarnykh obchyslen'*. Informatsiyni tekhnolohiyi v osviti : zb. nauk. pr. Vyp. 9 / M-vo osvity i nauky Ukrayiny, Khersons'kyy derzh. un-t ; redkol. O. V. Spivakovs'kyy [ta in.]. – Kherson : [b. v.],20 – 29.

Sidorova, K. (n.d.). *Using Google services electronic office of the teacher*. Available from: http::www.rostelecom.ru/projects/innovations/07/education/index.php

Svyrydenko, O. (2012). Khmarni tekhnolohiyi ta navchannya u shkoli – shcho spil'noho? *Informatyka ta informatsiyni tekhnolohiyi v navchal'nykh zakladakh, 5,* 29 – 32.

Zhernovnikova, O. A. (2014). *Zastosuvannya hmarnih tehnologIy pri pIdgotovtsI studentIv pedagogIchnih VNZ* / MaterIali HI naukovo-praktichnoYi konferentsIYi molodih uchenih «MetodologIya suchasnih naukovih doslIdzhen» (11–12 listopada 2014 r., m. HarkIv). – HarkIv: HNPU ImenI G.S. Skovorodi, C. 19-20.

Zhernovnikova, O. A. (2015). Zastosuvannya hmarnih tehnologiy pri pidgotovtsi maybutnih uchiteliv matematiki do navchalnogo proektuvannya / TavrIyskiy vIsnik osvIti: naukovometodichniy zhurnal. – Herson: KVNZ «Hersonska akademIya neperervnoYi osvIti», Vip. 3(51). 98–104.



Copyright © 2016 by KAD International All rights reserved.
Published in the Ghana

http://kadint.net/our-journal.html

RESEARCH ARTICLE



# Professional Readiness of Teachers to Use Computer Visualization Tools: A Crucial Drive

Elena V. Semenikhina a, \*, Artem A. Yurchenko a

<sup>a</sup> A.S. Makarenko Sumy State Pedagogical University, Ukraine

<u>Paper Review Summary:</u> Received: 2016, October 28

Received in revised form: 2016, November 26

Acceptance: 2016, November 27

#### **Abstract**

The training of teachers involves the formation of skills which are meant to be used in their future professional activities. Given the exponential increase in information content, there is a need to look into the levels and components of the professional readiness of teachers to use computer visualization tools. This article describes the four levels of teachers' readiness [passive, basic, conscious, active] to use computer visualization tools. These levels are based on the proposed components of teachers' readiness [motivational, cognitive, technological, reflexive] to use these tools.

**Keywords:** Computer Visualization Tools, Professional Readiness, Teachers, Training.

#### Introduction

The present training of teachers shows a rapid increase in the magnitude of informational content. To develop the intelligence and thinking of students, there is the need for text data visualization of training materials. The analysis of the scientific and methodological sources confirmed the effectiveness of usage the visualization technology in studying natural and mathematical sciences (Semenikhina, & Drushlyak, 2015; Udovychenko, Shamonya, & Yurchenko, 2015).

Evident in previous works of scientists, visual representation of materials helps to avoid formalism in learning. It also activates innovation, resourcefulness and promotes critical thinking (Semenikhina, 2014; Semenikhina, & Yurchenko, 2014; Udovychenko et al., 2015). To pay special attention to this capacity of visualizing concepts and their properties, it is necessary to understand that professional training of teachers requires the formation of skills to use 'Means of Computer Visualization' [MCV] (Averbuh, Baydalin, & Bakhteev, 2010).

The formation of visual images is widely used in educational methods. These processes allow information to be transmitted using specialized tools to illustrate any material. Currently, computer visualization is seen as one of the novel ways of transferring ideas or images in virtual space plane (Averbuh, Baydalin, & Bakhteev, 2010; Babych, & Semenikhina, 2014).

\_

E-mail addresses: e.semenikhina@fizmatsspu.sumy.ua (Elena V. Semenikhina), a.yurchenko@fizmatsspu.sumy.ua (Artem A. Yurchenko)

<sup>\*</sup> Corresponding author

As noted, computer visualization allows students at present to watch the simulation of objects or processes because of their geometric counterparts (images) (Averbuh et al., 2010). Among the distinct means, computer visualization tools can use good software environment to provide dynamic handling of model objects. Substantive knowledge in the field of school education shows that, it is important to focus on object-oriented environments during computer visualization. The use of such means leads to a shift of emphasis in training of modern teacher from being abstract to rather, a technical graduate of modern pedagogical science, who is ready to use MCV in their own careers (Babych, & Semenikhina, 2014).

Special attention revealed by pedagogical works have shown that the concept of readiness is viewed from the functional viewpoint [as a mental state of the individual individual] and from the standpoint of personal approach [as a new growth or quality of the individual]. Scientists say that the readiness to engage in an activity means that 'state of the individual' is set for the particular type of activity. Thus, there is the need to create the best awareness for all the methods, techniques or means that are needed to aid implementation of such activity. In essence, the readiness for educational activities [narrow sense] should be seen as a set of personality traits [teacher], which are responsible for the current implementation of educational activities and the later basis for further creative and professional self-improvement (Borovkov, 2003).

To this end, the purpose of this study is to provide a philosophical analysis of professional teachers' readiness to use MCV. This study also offers a review on how MCV uses modern tools to support the learning process. Though theoretical in approach, this paper aimed at providing empirical foundation for pedagogy in modern information society.

## **Methods**

The methodological basis of this article is set up on the philosophical ideas of the modern information society. Much precedence is given to the theory, methodology and practice of teaching disciplines of physics, mathematics and computer science.

To achieve the purpose of this study, the following methods and materials were used:

- 1. The review of literature related to the investigated problem [that is, philosophical, psychological, pedagogical and methodological]. This involve studies in the area of advanced pedagogical experiences, the content of curricula, programs, textbooks, and teaching aids.
- 2. The modeling of learning activities, which are based on information and communication technologies, including MCV.

#### Results

In general, the paper shows two major themes under the readiness of teachers to use MCV. These include; (a) levels of teachers' readiness and (b) components of teachers' readiness.

## Theme 1: Levels of teachers' readiness to use MCV

There are four different subthemes under the levels of teacher readiness use MCV in professional activities.

1. The passive level — is characterized by low motivation to use MCV in learning and creative self-realization; an elementary (basic level) theoretical and technological preparation for the implementation MCV during the learning process. There is a fragmented capacity for analysis and introspection of the educational process. In addition, there is a lack of desire to implement MCV in their own profession, while displaying a passive attitude towards MCV colleagues.

Teachers that fall into this level of formation refer to the MCV implementation as an alternative to the traditional practice of teaching. The basis for this attitude often lack emotional, and intuitive perception of readiness for novel technology and timid attitude towards technical training.

2. The elementary level – is characterized by a limited interest in using MCV. It denotes a situational interest to the experience of its use, and a situational willingness to implement MCV tools in professional activities. At this level, there is the need for additional motivation.

In this group, teachers may form fragmentary knowledge about the appropriateness of MCV during different forms of lessons. Though various forms and methods are used, there is an evidence of a rare capacity to attract the use of MCV instruments for education.

Other characteristics at this level include; (a) little professional activities to attract MCV use, (b) an uncertainty in the usefulness of certain MCV tools, (c) the lack of self-orientation based on MCV in the selection and application of teaching methods, (d) no perceived need for mastering MCV tools with additional disjointed interest in the development MCV and their implementation by others, and (e) no desire to experiment is isolated desire for professional growth.

3. The conscious level — is characterized by awareness of incentives to take up MCV. It incorporates creativity, self-sufficient theoretical models, and substantive technological training in the field of MCV implementation. Though sufficient professional teachers' interest to learning how to use MCV exists, there is a partial ability to critically evaluate selected tools.

Teachers of this group are generally familiar with the theoretical essentials of education. They also have a sufficient subject knowledge in computer science and mathematics education. They make use of MCV in their own careers, but such usage is often fragmentary and unsystematic. Finally, pedagogical reflection in them is often insufficient.

4. The active level — is characterized by a conscious and reasoned motivation for implementing MCV in professional activities. It includes the following characteristics; (a) a creative self, (b) solid theoretical essentials, (c) substantive technological training in the field of mathematics education, (d) the ability to critically evaluate the available tools in the context of the chosen forms and methods, (e) a mature internal readiness for MCV usage, and (f) awareness of the need for continuous review of these tools and technologies.

Teachers of this group are actively experimenting with the introduction MCV, as well as a having developed a good sense of professional reflection. The realization of the creative potential of many of them is an important element of self-realization.

## Theme 2: Components of teachers' readiness to use MCV

Under the second theme, this analysis revealed four different component subthemes of future teacher's willingness to use MCV as an individual. These include the following:

- 1. The motivation component: is characterized by professional motivation and the degree of interest in the future of teaching and learning activities. This component houses the motivation and availability required for professional development. Additionally, it consists of the knowledge of public importance and the ability to maintain a stable professional position. This component promotes the desire for teaching and learning skills development. Motivational component indicators include; (a) the readiness to use MCV to serve the interest of the teaching profession and its activities, and (b) the awareness of the importance of formation using MCV.
- 2. The cognitive component is characterized by the existing system of knowledge about the educational subjects using MCV in the context of demonstrating such knowledge. This involves the knowledge formation regarding; computer tools, specialized software designed to apply visual methods, and the knowledge of the principles of MCV used in the classroom. The indicators of the cognitive components are (a) holistic knowledge, (b) sound understanding and (c) systematic applications of knowledge.
- 3. The technological component is characterized by methodological and technological skills needed for providing MCV solutions. This provides meaningful grounds for both educational and professional tasks. There is also the possession of a sufficient level of computer facilities and their conscious usage for professional activities. The indicators are; (a) the technological component of operational skills and technical skills [the first characterized by formation skills to solve common problems using computer tools MCV, the second formation techniques MCV used in professional activities]. Based on the forms and methods of individualization and differentiation, they form ideas about common errors in the use MCV tools and the best ways to overcome them.
- 4. The reflective component is characterized by the ability to control, check and analyze personal professional and students' activities. This component also involves the self-assessment of activities to improve personal teaching methods and innovative approaches. Indicators of the reflective component are; (a) the ability to conduct introspection and the self-development [which include the formation of a sense inner readiness to use the tools MCV], (b) the formation of a critical understanding about the use of MCV, (c) the analysis of the effectiveness of the recognised methods, and (d) the MCV techniques used in the study of mathematics.

#### **Discussion**

The analysis shows that the formation of professional readiness is an integral part of a comprehensive training of future specialists. In the context of this study, willingness of future teachers to use MCV was interpreted as the set of personal qualities of students [future teachers] to effectively implement ongoing educational activities - based on MCV.

Thus, the philosophical analysis of this paper focuses on the factors affecting the implementation of creative approaches to training and professional growth (Semenikhina, & Drushlyak, 2015). In effect, an active cooperation between teachers and students should focus on the following: (a) the awareness that there is many different software for educational purposes; (b) recognition of MCV among other software; (c) mastering MCV technology tools and their use in solving typical classes problems; and (d) raising MCV awareness for effective learning and subsequent desire to use it. In addition to the need for active cooperation, teachers' readiness to use MCV is essential.

The formation of teachers' readiness to use MCV need to involve the formation of ICT competence as defined by some recent researchers (Babych, & Semenikhina, 2014; Semenikhina, & Yurchenko, 2014; Udovychenko, & Shamonya, & Yurchenko, 2015; Udovychenko, & Yurchenko, 2014; Semenikhina, 2014). Along with professional teachers' training as a key player in the information society. This may impose additional requirements such as: (a) the ability to direct the educational process of the individual pupil or student, and (b) build professional activities accordingly for every student to gain opportunities for continuous development through information tools. Though this describes teachers' professional training, teacher readiness criteria can help their special mental characteristics [e.g. motor skills, cognitive abilities, especially perception and processing].

It had been noted over a decade that the professional teacher should consider the availability of motivational attitudes. Such activities lead to an effective means of achieving educational goals, creativity and capacity for reflection (Dychkivska, 2004). It will be contradictory to accept an approach where the readiness criteria serve only the knowledge and skills of teachers. Equally important in the context of teachers' readiness to use MCV is their awareness of the need to introduce MCV in their own practice and to know about new available information technologies.

#### **Conclusion**

The formation of readiness to use MCV among future teachers is not only a pedagogical need but a prerequisite for global development. This article presents analysis of studies in the area of MCV usage within the educational settings. The study documented two major themes; (a) levels of teachers' readiness and (b) components of teachers' readiness. This means that each previous level of readiness is a prerequisite for the formation of the next. The timely and objective definition of a particular level gives access to appropriate self-development and self-improvement, which are important professional qualities. The use of MCV will have considerable impact on the; innovativeness of teaching methods, task assignment, research, motivation of teachers and students to overcome the difficulties of methodological, technical, personal character, and creativity needs. These factors affecting teachers' readiness to use MCV will have an impact future teachers' experience during teaching practice and future professional work.

#### **Conflicts of interest statement**

The authors declare that they do not have any conflict of interest.

#### References

Averbuh, V. L., Baydalin, A. Yu., & Bakhteev, M. O. (2010). Experience of development of specialized systems of scientific visualization. *Nauchnaya vizualizatsiya*. - *Natsionalnyiy Issledovatelskiy Yadernyiy Universitet "MIFI"*, 4, 27-39.

Babych, O., & Semenikhina, O. (2014). To questions about interpretation of clarity and visualization. *Fizyko-matematychna osvita*. *Naukovyi zhurnal*, *2*(3), 47-53.

Borovkov, A. B. (2003). The willingness of teachers to use information technologies in teaching activities as the basis for the ICT competence. Doklad: Mezhdunarodnyiy kongress konferentsiy "Informatsionnyie tehnologii v obrazovanii" (ITO-2003). Retrieved on 28<sup>th</sup> Octomber, 2016 from:

http://www.ict.edu.ru/vconf/index.php?a=vconf&c=getForm&r=thesisDesc&d=light&id\_sec=118 &id\_thesis=4197

Dychkivska, I. M. (2004). *Innovative pedagogical technologies: navch.* posib. K.: Akademvydav.

Semenikhina, E. (2014). Development of Dynamic Visual Skills SKM MAPLE among future teachers. *European Journal of Contemporary Education*, 10(4), 265-272.

Semenikhina, E. V., & Drushlyak, M. G. (2015). The Necessity to Reform the Mathtmatics Education in the Ukraine. *Journal of Research in Innovative Teaching*, 8, 51-62.

Semenikhina, O., & Yurchenko, A. (2014). Ability to visualize multimedia educational material as professional competence of the teachers. *Naukovyi visnyk Uzhhorodskoho natsionalnoho universytetu: Seriia «Pedahohika. Sotsialna robota»*, 33, 176-179.

Udovychenko, O. M., & Yurchenko, A. O. (2014). *On the necessity of visualization of educational material in electronic textbooks on disciplines of computing*. Paper presented at the Ninth International Conference - "New information technologies in education for all" (ITEA-2014). November 26, 2014. Kiev, 276-279.

Udovychenko, O. N., Shamonya, V. G., & Yurchenko, A. A. (2015). Visual support for study information systems as a basis of the modern teacher ic-competence formation. Modern trends in physics and mathematics education: school – University. Paper presented at the International Scientific-Practical Conference, April 17-18, 2015, Solikamsk, 79-83.



Copyright © 2016 by KAD International All rights reserved.
Published in the Ghana

http://kadint.net/our-journal.html

RESEARCH ARTICLE



## Professionally-Oriented Communication Styles of Social Pedagogues: A Review

Tetiana Savchenko a,\*

<sup>a</sup> Kherson State University, Ukraine

Paper Review Summary:

Received: 2016, November 02

Received in revised form: 2016, November 27

Acceptance: 2016, November 29

#### **Abstract**

Communication is important in all human endeavours. This article evaluates the concept of "style" - in a professional setting. This paper comprehensively examines, the "individual style of communication", the "style of pedagogical communication" and the "social pedagogues' professionally-oriented communication style". It also examines the essence of an individual style of professionally-oriented communication among social pedagogues. The main focus of this paper concentrates scientists' views regarding the characteristics of each communication style. Finally, the major professionally-oriented communication styles within the spectrum of social pedagogues were similarly analyzed. An effective individual style of productive communication is the best style of professionally-oriented communication among social pedagogues.

**Keywords:** Communication Style, Individual Style, Productive, Professionally-Oriented Communication, Social Pedagogues.

#### **Introduction**

The competence development among social pedagogues is reasonably relevant nowadays. Special attention is paid these days to their professionally-oriented communication skills. These skills include; dialoguing skills, listening skills, speaking skills, and questioning skills. It is vital that social pedagogues master these basic skills during their professional and academic training.

The question of establishing a particular "style" of professionally-oriented communication among social pedagogues is significant. This is because of the fact that all professional activities depend on it, especially the regulation of interactions between specialists and their clients to offer solution to identified problems. As a result, much efforts have been channelled into training specialists' communication skills.

A lot of scientific works are dedicated to training of specialists' style of communication. It is necessary to highlight scientists' researches, which are devoted to issues regarding the formation of specialists' communication styles (Chukavina, 2005; Omelchenko, 2009; Savenkova, 2014; Sysiuk, 2004; Uvarova, 2005). The scientific works of Kan-Kalyk and Volkova are however dedicated to the problem of professional communication formation (Kan-Kalyk, 1979; Kan-Kalyk, 1987; Volkova,

-

E-mail addresses: tat-zaj@mail.ru (T. Savchenko)

<sup>\*</sup> Corresponding author

2006). In spite of a large number of scientific publications, insufficient attention is given to the nature and role of "style" in the scope of social pedagogues' professionally-oriented communication. The purpose of this article is to reveal the professionally-oriented style of social pedagogues' communication.

## The essence of the concept - "Style"

The concept "style", as T. Chukavina notes, is often used in modern psychology. She points that it was introduced in the late 20-ies of XX century by A. Adler, who proposed the concept of "an individual's lifestyle". Hence, the concept - style is simply seen as "a characteristic of a certain individual strategy of vitality, that is directed by targets system, whose achievements provide an opportunity to compensate the inferiority complex, to protect against reality, to adapt to the environment" (Chukavina, 2005, p. 65).

T. Chukavina in her research allude to G. Allport's opinion that the concept "style" includes the uniqueness of a form of operation system, in which the person can behave through his / her individual properties ["behavioral style"]. The scholar also notes in her study that researchers as K. Lewin, R. Lippit, and R. White marked the beginning of an in-depth study of the "style" category. According to Chukavina (2005), such previous analysis depicted the concept of "style" as ways and means individuals employ to accomplish leadership roles in group settings. She writes that "the common element for all these studies is to understand the individual style as personality characteristics" (Chukavina, 2005, p. 65).

Omelchenko (2009) considers that "the conceptual status of the individual communication style was first developed by V. Merlin" (Merlin, 1982; Merlin, 1986). She notes a number of features singled out by V. Merlin (1982; 1986). This include a 'vague space', which is the basis of the individual style formation [this is the fulfilment of any kind of activity involving the freedom of choice]. As a person demonstrates this through his / her sense of individuality, he / she use intermediate goals and their means to achieve them. The style as a concept by Merlin is also based on a person's freedom of expression. This opens the door for personal and public admiration of specialists' activities. The concept of the individual style can be formed on the basis of a positive attitude towards work and the desire to improve it. It can be formed rather as a systemic function during the later stages of human development. For the most part, an individual style of communication fulfils a compensative function [helps a person to build on his / her own strengths in the process of professional activity fulfilment] (Merlin, 1986, p. 93).

Omelchenko (2009) confirms that this phenomenon by Merlin (1986) considered the concept as "a unity of components (operations style, actions and reactions style and goal-setting style)". The scientist also notes in her study that, Merlin (1982; 1986) interpreted the individual style of communication as a discrete kind of activity style. She remarks that Merlin (1982; 1986) transferred all the above mentioned characteristics of the activity style to the communication style. Merlin (1982; 1986) considered the individual style of communication as a person's systemic core factor; which is reflected in all levels – from physiological to socio-psychological properties (Omelchenko, 2009, p. 224).

# Definition of the essence of the concept - "The style of pedagogical communication"

The style of pedagogical communication can be determined as an identified system of methods and techniques; which the teacher can use in the process of interaction with pupils / students. The style of pedagogical communication is represented in "the uniqueness of teacher's personal qualities and communicative abilities, his / her creative manner, type of relationship with the students, and particular characteristics of pupils' group" (Volkova, 2006, p. 44).

Consequently, we identify social pedagogues' professionally-oriented communication style as a characteristic of personality. This consists of: (a) operations style; (b) actions and reactions style; (c) goal-setting style; and (d) statement tasks communication style at the time of direct interaction with the client.

Additionally, it is important to note that specialists' professional and personal qualities are based on the individual style of social pedagogues' professionally-oriented communication. Kan-Kalyk (1987) pointed out that "mastering the basics of professional pedagogical communication should take place at the individual creative level". The scientist also claims that

"the most important task of a new teacher is the search for individual communication style, a search that must be carried out systematically" (p. 105). Kan-Kalyk (1987) noted that the for a person to develop his / her individual communication style, the following steps are to be adhered to:

- 1. Define and review personal peculiarities;
- 2. Define the disadvantages and errors resulting from the individual communication. [Constant work should be done to overcome shyness, constraint, and the negative elements of the communication style];
  - 3. Master the elements of communication based on personal peculiarities;
- 4. Master methods of communication in accordance with the prevailing style of communication;
- 5. Constantly engage in educational / pedagogical activities [e.g. communicate with children].

As a consequence, these steps consolidate the individual communication style of professionals (Kan-Kalyk, 1987, p. 105).

The formation of social pedagogues' professionally-oriented style of communication is both labour-intensive and time-consuming. This process automatically brings on board the study of the individual's characteristics, which is complicated by the direct process of communicating with the client and further mastering of technological tools for professionally-oriented communication.

An example of correct style of professional communication can be learnt from the ways professional social workers encounter and settle social work problems. These include;

- 1. The psycho-pedagogical and social impressions realized as part of the work of professional social work;
- 2. The social workers communicate by achieving mutual understanding of clients to offer the maximum solution to their problems;
- 3. The interaction between social workers and their clients occurs in the atmosphere of cooperation.

Thus, these allow to them build constructive relationships with their clients and also achieve the purpose of their communication (Kaniuk, 2009, p. 27). As social workers aim at solving clients' problems, it be can be concluded that certain characteristics of professional communication [such as authoritarian, liberal and democratic] were employed. These styles of communication, as noted, can occur in the professional activity of social workers. It can be also stressed that the above mentioned styles of professionally-oriented communication are peculiar for social pedagogues' activities (Kaniuk, 2009).

## The Essence of the characteristics of communication styles

There are three basic characteristics of communication styles. The first example is the authoritarian style. According to Kaniuk (2009), "the authoritarian style of communication is based on the prohibition, the strict regulation of relations and clients' behavior, the suppression of the individual clients' initiative, the ignoring of his / her individually-psychological properties" (p. 28). Volkova (2006) however pointed that "an authoritarian teacher personally determines activity direction, he/she is the intolerant of pupils' objections, that is suppressed their initiative and control them". She highlighted that the main forms of teacher's interaction providing such style of communication are order, correction, instruction and rebuke (p. 45).

The second example is the liberal style. Kaniuk (2009) indicated that the liberal style is the opposite of the authoritarian; therefore, the process of communication is spontaneous. In effect, a social worker loses control and initiative power in communication is fully transferred to the client. Volkova (2006) turned attention to the fact that teacher's usage of the liberal communication style is manifested in non-intervention level. Such communication examined externally, may seem democratic, but the process of communication can be out of control through passivity, lack of interest and responsibility, and unclear programs (p. 45).

The third example is the democratic type. It is important to note that this is the most productive style of communication. A social worker for example, can organize productive interaction and cooperation with a client following this communication style. The specialist does not lose control over the communication process, but also allows the client to be initiative during care. This is helpful to the client as it promotes their voice and needs (Kaniuk, 2009). Volkova

(2006) also described the democratic style of communication to be based on mutual respect, trust, orientation to self-organization, collective and person's autonomy. This style of communication is founded on the desire to delate the activity purpose, to rather involve pupils / students in joint activities. The democratic style of communication is provided by the usage of such basic interaction methods for developing learners' confidence and resourcefulness through teachers' encouragement, advice, information and coordination (Volkova, 2006).

The social pedagogue's usage of any style of professionally-oriented communication is dependent on the client's personality, the situation of interaction, the client's problems and the goals of communication between them. Kaniuk (2009) argued that there were two main types of speech styles [formal and informal] in the communication process. She emphasized that the functional styles of verbal behavior differ from each other in the choice of vocabulary and expressive means. Accordingly, the social worker should be able to move easily from one communication style to another, taking into account the context of each specific situation. As a rule, the formation of the social worker's individual style of communication requires a lot of efforts over extended periods. The individual speech style is therefore manifested in manner of self-expression [e.g. vocabulary, intonation, facial expressions, pantomimic]. It is also important to note that professional ethics requires a certain speech discipline, strict adherence to literary norms which do not allow using the dialects' jargons in both formal and informal communication (Kaniuk, 2009). Notwithstanding these dynamics, Omelchenko (2009) pointed out that some researchers identified it as a productive style of communication within the scope of individual style of pedagogical communication (Kan-Kalyk, 1979; Kan-Kalyk, 1987).

This style offers tangible psychological contact [e.g. negotiation of psychological barriers affecting pupils' cooperation] and it enhances pedagogical interaction. Interpersonal relationships among pupils and teacher when combined with both business and personal levels of communication form an integral social and psychological structure of pedagogical process (Kan-Kalyk, 1979). Social workers engaging in this professionally-oriented style of communication with their clients - for example, manifest a joint responsibility for the outcome of their communication process. In addition, there is an opportunity for rapid contact establishment with the clients using dialogic interaction.

For productive professionally-oriented communication, the future specialist must master skills such as: the skills of verbal and non-verbal communication, the ability of self-presentation, the ability to initiate communication, listening skills, the ability to speak, the ability to persuade, the ability to give feedback, the ability to establish a positive emotional connection, and the ability to take into account the individual characteristics of the client. Considering the individual style of pedagogical communication, it is argued that psychological indicators of successful pedagogical communication are their sources of spontaneity and facility. These provide professionals with skills needed to stimulate their self-regulation (Savenkova, 2014). Savenkova, (2014) also pointed out that the productive style is the most effective individual style of pedagogical communication. The productive style of pedagogical communication in effect "is a system of operations that make available, the subject-to-subject level of communication and its achieved mutual understanding, pedagogical contact and its management, the achievement of educationally-effective result in teacher activity" (Savenkova, 2014, p. 26).

Sysiuk (2004), studying the style of teachers' pedagogical communication in higher education institutions noted that, the style of communication is formed not only in accordance with the individual typological characteristics of teachers, but also according to the demands of the situational interacts. Thus, according to the degree of teachers' readiness for different situations of communication, the scholar identifies three communication styles: (a) "ritual [posed by intergroup situations] - to maintain the relations with society, (b) manipulative [generated by business situations] - to partner as a means of achieving external goals, and (c) humanistic [generated by interpersonal situations] is aimed at satisfying the requirements of understanding, compassion, empathy" (p. 14). The style of pedagogical communication is "not only as a time stable, transsituational methods, techniques and expressive forms of teacher communication, but also as his / her personal wealth, which is the result of professional self-determination and self-actualization". Therefore, there is the need for "the possibility of some components of pedagogical communication style formation, not only in the process of teacher's professional activity, but also

during professional training of students of pedagogical higher education institutions" (Uvarova, 2005, p. 8).

### **Conclusion**

In consequence, professionally important personal qualities and characteristics of the specialist as a person are the basics of the individual style of social pedagogues' professionally-oriented communication. Social pedagogues' style of professionally-oriented communication can be defined as some personal characteristics that include; the operations of the style, the style of actions or reactions, goal-setting style and problems of communication during direct interaction with the client. One of the main social pedagogue's tasks is the search for the individual style of communication; it must be carried out systematically, depending on the situations and problems of the client. If the social pedagogue chooses the right style of professionally-oriented communication, it will contribute to the successful solution of many professional problems.

The social pedagogues' activities include the main styles of professionally oriented communication as; authoritarian, liberal and democratic styles. For efficient professional activities, social pedagogues' must master the individual style of the professionally oriented communication in this regards. Productive communication style, which is the kind of personal style of social pedagogues' professionally-oriented communication, is characterized by active communication positions of specialist and client. This enables the achievement of both close and long range goals of communication. The productive style of social pedagogues' professionally-oriented communication is an effective individual style of productive communication. To this end, Omelchenko (2009) concluded that the determinants of individual style of pedagogical communication are: "personal mediation – the desire to communicate, that is corresponded to person's values [K. Abulkhanova-Slavska]; personal qualities [O. Bodalov]; the relation to person as inherent value [P. Rubinshtein, B. Bratus]; dialogue as equal partners' free communication [S. Bratchenko]" (p. 228).

#### **References**

Chukavina, T. E. (2005). *The levels of development and ways of improving styles of university teachers' professional communication*. Philosophy, Psychology, and Pedagogy, 63-69.

Kaniuk, O. L. (2009). Formation of skills of foreign business communication of future social workers in the process of professional training. PhD thesis. Uzhgorod.

Kan-Kalyk, V. A. (1979). *The Basics of professional-pedagogical communication*. Moscow: Pedagogy.

Kan-Kalyk, V. A. (1987). Teacher about the pedagogical communication. Moscow: Pedagogy.

Merlin, V. S. (1982) Individual style of communication. *Psychological Journal*, 26-36.

Merlin, V. S. (1986). The essay of integral individuality research. Moscow: Pedagogy.

Omelchenko, L. (2009). The individual style of pedagogical communication as a factor of effective interaction among the teacher and students. *Series pedagogy*, 223-231.

Savenkova, L. A. (2014). The productive style of pedagogical communication. *The Origins of Pedagogical Skills*, 21 - 27.

Sysiuk, A. Ya. (2004) The style formation of teachers' pedagogical communication of higher educational institutions. Moscow.

Uvarova, Y. V. (2005). Personal determinants of forming pedagogical communication styles of future teachers. Kyiv, Ukraine.

Volkova, N. P. (2006). Professional-pedagogical communication. Kyiv: Academy.