21st CENTURY LITERACIES: CHANGING THE PARADIGM IN EDUCATION

Ana MUNTEAN,
Alecu Russo State University of Bălţi

The illiterate of the 21ˢᵗ century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn.
Alvin Toffler

Rezumat: *Tehnologiile secolului al XXI-lea au schimbat nespus societatea, în măsura în care toţi cei ce se ocupă de educaţie la ora actuală atestează faptul că ea, educaţia, desemnează pregătirea persoanelor pentru un viitor puţin previzibil. Aceasta condiţionează redefinirea unor concept ca predarea etc.*
Cuvinte-cheie: *literacy, educaţie, paradigmă, formarea specialiştilor.*

Abstract: *21st century advanced technology has changed society greatly, and educators agree that education today means getting prepared for an unpredictable future. Therefore, such concepts as learning outcomes and literacy need to be redefined. The article draws on the extended meaning of literacy and defines it as a set of foundational skills and knowledge that all students need in order to achieve the learning outcomes associated with the qualities of an educated person, ready to enter a competitive labour market. The article suggests that studying a foreign language may be viewed as an efficient tool in developing 21ˢᵗ century literacies, thus it should be an obligatory part in future specialists' formation.*
Key-words: *literacy, education, paradigm, specialists' formation.*

Because of 21ˢᵗ century technology education no longer means what it used to in the past. We would like to assume that to present day students education means getting prepared for their future that is for life.

Therefore, educators need to redefine such concepts as literacy and academic outcomes.

The word *literacy* did not enter the English language until as late as 1883 in the US, and in 1893 in the UK and it referred to reading, writing or arithmetic. It must be pointed out that according to the Online Etymology Dictionary the word *illiteracy* dates back to 1556, from Latin *illiteratus* "unlearned, ignorant," from *in-* "not" + *literatus*, lit. "furnished with letters."

Computer literacy is recorded from 1970[87].

Chambers English Dictionary (1990) explains *literacy* as the condition of being literate, which is able to read and write. It also holds the term computer-literate[88]. Oxford Advanced English Dictionary provides an entry for *literacy* as the ability to read and write [4].

It goes without saying that literacy in the 21ˢᵗ century is not based on how much one knows or how well one can read or write. The times are changing so rapidly that the concept is getting a wider meaning, different from that recorded by dictionaries and educators need to be aware of it.

David Warlick in his "Learning Literacies for the 21ˢᵗ Century" points out that "for the first time in history our job as educators is to prepare our students for a future that we cannot clearly describe." He underlines the importance of a dialogue that professional educators should have in order to decide what students need to be taught nowadays so that they get ready for an unpredictable future[89].

A group of educational experts and policymakers meeting to discuss the challenges of American education were addressed the question: What are the success factors, the skills students need to be successful?

Cynthia Brown, Vice President for Education Policy answered: "First of all you have to be literate." And she continues: "We need to better integrate problem solving and technology into the classroom" [2].

It is not only this question and answer, but an overall environment come to suggest that the original meaning of literacy as the capacity to decode written communication is no longer relevant. It has extended to refer to a set of abilities and skills. Reading has expanded into the ability to select, decode, evaluate and store. Writing expands into the ability of expressing ideas compellingly and creatively.

UNESCO has defined literacy as the ability to identify, understand, interpret, create, communicate, compute, and use printed and written materials associated with varying contexts[90]. This definition emphasizes how the contexts in which students use literacy have evolved. Students are using cell phones not in its primary function only, but to write messages, e-mail, surf the internet, listen to messages, etc. In addition, they are very smart with the newest programs and softs designed for the personal computers.

Sir Ken Robinson, PhD, is an internationally recognized leader in the development of education, creativity and innovation. He speaks to audiences throughout the world on the creative challenges facing business and education in the new global economies. In answer to the question *Why don't we get the best out of people?* Ken Robinson argues that it is because we have been educated to become good workers, rather than creative thinkers. Students with restless minds and bodies – far from being cultivated for their energy and curiosity – are ignored or even stigmatized, with terrible consequences. "We are educating people out of their creativity", Robinson says[91]. It's a message with deep resonance. It puts an emphasis on the necessity to change our attitude towards the expected learning outcomes of our students.

How do 21ˢᵗ century literacies relate to students' learning outcomes? In a broader definition of literacy we may conclude that 21ˢᵗ century literacies refer to foundational skills and knowledge that all students need in order to achieve the learning outcomes associated with an educated person ready to enter a competitive labour market.

The Ministers responsible for higher education in the 46 countries of the Bologna Process convened in Leuven/Louvain-la-Neuve, Belgium, on April 28 and 29 2009 to take stock of the achievements of the Bologna Process and to establish the priorities for the European Higher Education Area for the next decade. In their Communiqué it has been emphasized that labour markets are increasingly relying on higher skill levels and transversal competences. Thus, the importance of the teaching mission of higher education institutions has been reasserted as well as the necessity for a curricula reform geared toward the development of learning outcomes [3]. Moldova joined the

---

[87]*Online Etymology Dictionary*. Retrieved November 28, 2011, from Dictionary.com website: http://dictionary.reference.com/browse/illiterate
[88]Pandora Kerr Frost, *Chambers English Dictionary*, 7ᵗʰ edition, Chambers, 1990.
[89]Warlick, David, *Literacy and Learning in the 21st Century //* http://www.slideshare.net/dwarlick/literacy-learning-in-the-21st-century
[90]Tompkins, Gail, *Literacy for the 21ˢᵗ Century: a Balanced Approach*, 4ᵗʰ ed., Pearson prentice Hall, 2006.
[91]Robinson, Ken, *Out of Our Minds: Learning to Be Creative,* revised and updated edition, Capstone Publishing Ltd, 2011.

Bologna Process in 2005. Some key developments attained since then include reform of degree system (three cycles of education), revision of educational standards and requirements, etc. One of the future challenges includes employability of graduates. It means HE institutions in Moldova will be made to be more responsive to employers' needs, to pay particular attention to improving the teaching quality of the study programmes, to continue to develop learning outcomes in accordance with the programmes.

At this point, it has become urgent to define the learning outcomes in higher education. University of Warwick defines learning outcomes as the skills and knowledge a student will possess upon successful completion of a course. Learning outcomes as set out in Warwick course specifications are divided into four categories:

1. Subject knowledge and understanding;
2. Subject-specific skills are practical skills, practice of which is integral to the course, e.g. laboratory skills, language skills, counselling skills;
3. Cognitive skills, intellectual skills such as an understanding of methodologies, synthesis, evaluation or ability in critical analysis;
4. Key skills are skills that are readily transferable to employment in other contexts, such as written and oral communication, working within a team, problem solving, numeracy and IT skills[92].

Stephen Adam notes that the creation of learning outcomes is not a precise science and they require considerable thought to write. Learning outcomes are commonly further divided into different categories of outcomes. The most common sub-divisions are between: subject specific outcomes that relate to the subject discipline and the knowledge and/or skills particular to it; and generic (sometimes called key transferable skills) outcomes that relate to any and all disciplines e.g. written, oral, and problem-solving, information technology, and team working skills, etc. Adam believes that the identification of generic skills is seen as important in enhancing the employability of graduates whatever their discipline [1].

Strictly speaking, we may assume that a learning outcome should answer the question: What should a student be able to do at the end of instruction/training?" It should come along with assessment of student learning. Thus, a student should be widely aware of what we are doing in the classroom, why we are doing it and what the expected results might be. Learning outcomes are broad goals that describe what the learners are supposed to know or be able to do and may be based upon the needs of the learner, the needs of society and what the learner should know about a particular subject. Because learning outcomes are broad goals, they are stated in general terms. For example, "The student will become familiar with the major forms and conventions of Romantic literature" or "The student will develop a general understanding of Victorian Values" may be taken as reasonable learning outcomes. On their own, however, learning outcomes like these cannot be observed, measured, or evaluated. Each learning outcome, therefore, must be supported and defined by one or more specific objectives. Objectives are the primary building blocks of good curriculum design. They support the learning outcome in that each is a small step in arriving at what the learner is supposed to know or be able to do. The following guidelines should be kept in mind when we write objectives to support the learning outcomes in our modules:

- Sequence the content of each objective in a logical order, for example, from simple to complex, from known to unknown, chronologically, etc.
- Avoid the use of verbs that represent actions or concepts that are difficult to measure, such as *appreciate*, *be familiar with*, *believe*, *comprehend*, *enjoy*, *know*, *learn*, *master*, and *understand*.
- Avoid the use of vague qualifiers, such as *very*, *completely*, *fully*, *totally*, and *quickly*[93].

Learning a foreign language should be viewed and used as an efficient tool in developing 21st century literacies. Because languages are complex, with rules and exceptions, mental agility and flexibility is required in studying them. Learning and applying these rules requires thinking and analysing, as well as accepting that languages are different from each other. It develops a sort of open-mindedness, as well as creativity and divergent thought. Studying a foreign language also involves dedication and tenacity. Continuing to learn a language in spite of disappointments, lack of time or any other reasons, educates a person who can put an effort to achieve a set goal. It is through language learning that we grow more culturally-aware and more tolerant persons, with a greater capacity to understand people. Finally, mastery of a foreign language might be useful in building one's career.

The European Concept of Higher Education is oriented towards preparing highly qualified individuals with knowledge of foreign languages, intercultural communication and multidisciplinary skills. It is not clear yet to what extend our University responds to this demand of the time. However, it is definitely urgent to discuss and adopt a unified policy regarding the concept of foreign language instruction at the University in view of raising employability of our graduates nationally and internationally.

References:

1. Adam, S., *Background Report for the Edinburgh Bologna Seminar Using Learning Outcomes, A consideration of the nature, role, application and implications for European education of employing 'learning outcomes' at the local, national and international levels*, 2004 //:http://www.scotland.gov.uk/Publications/2004/09/19908/42704
2. *American Education in the 21st Century* //"The New Yorker", April 25, 2011, p. 37-40.
3. *Communiqué of the Conference of European Ministers Responsible for Higher Education*, Leuven/Louvain-la-Neuve, Belgium, 28-29 April 2009.
4. Hornby, A. S., *Oxford Advanced English Dictionary*, 7th edition, Oxford University Press, 2005