Asesorías y Tutorías para la Investigación Científica en la Educación Puig-Salabarría S.C.
José María Pino Suárez 400-2 esq a Lerdo de Tejada. Toluca, Estado de México. 7223898475
RFC: ATI120618V12

**Revista Dilemas Contemporáneos: Educación, Política y Valores.**
**http://www.dilemascontemporaneoseducacionpoliticayvalores.com/**
**Año: VI Número:3 Artículo no.:50 Período: 1ro de mayo al 31 de agosto del 2019.**

**TÍTULO:** Curso electrónico de idioma extranjero como medio de formación informal del desarrollo de alfabetización digital.

**AUTORES:**

1. Senior Lect. Elena Soltovets.
2. Dra. Oksana Chigisheva.
3. Dr. Denis Dubover.

**RESUMEN:** Los cambios en el paradigma de información y educación llevaron a la necesidad de crear unas formas nuevas mixtas de formación virtual y en el aula. Al mismo tiempo el proceso está considerablemente dificultado por el nivel bajo de la alfabetización digital de estudiantes. El artículo analiza el curso interactivo “Famous People”, cuya creación y acompañamiento se realiza por el personal docente de la Universidad Federal del Sur. Una de las tareas en el proceso de la elaboración de un curso de idioma extranjero a distancia fue crear un ambiente cómodo para formación informal. Todo ésto plantea ante el profesor acompañante unas alturas nuevas del perfeccionamiento profesional, cuyos aspectos determinados se revelan sólo en la práctica.

**PALABRAS CLAVES:** formas mixtas de aprendizaje, curso electrónico interactivo, formación informal, alfabetización digital, aprendizaje de idioma extranjero.

**TITLE:** Foreign language e-course as informal learning tool for digital literacy development.

**AUTHORS:**

1. Senior Lect. Elena Soltovets.
2. Dra. Oksana Chigisheva.
3. Dr. Denis Dubover.

**ABSTRACT:** The changes of the world knowledge acquisition paradigm have resulted in the necessity of the new, blended education forms, the process being at the same time impeded by the low level of learners' digital literacy. The peculiarities of practical teaching needs and challenges of the new tutoring standards have been met in the tailored course "Famous people", designed and introduced in Southern Federal University. Learning foreign language through distant course should help to create comfortable environment for informal learning. That adds to the scope of tutor responsibilities and proficiency, some aspects of which being only revealed in the practical application experience.

**KEY WORDS:** blended learning, interactive e-course, informal learning, digital literacy, foreign language learning.

## INTRODUCTION.

There is a long-term upward movement in modern Russian education towards the use of distance forms of teaching. To increase the courses' accessibility, universities opt for digitalizing their educational programmes. The trend has benefited the sphere of teaching English as a second language, since digital media and communications provide a unique sociocultural environment able to subtly improve learners' internal motivation.

Simple computer-assisted learning had no such exhilarating effect due to the fact that using the Internet for classroom and extra-curricular activities has made English the means to an end, rather than an end in itself. What is more, online and blended courses set the scene for incidental learning by enlarging virtual classroom to a global extent. This works especially well with a multi-level and multinational group, that is increasingly often the case nowadays. Students find themselves put in versatile environments where individual needs are met in real-life experience. Remarkably, such situated learning covers different spheres, some of them being quite far from foreign language teaching. An example of such co-beneficial informal learning can be seen in learners' digital literacy development.

Many scholars explore the phenomenon of literacy and digital literacy (Hallam et al., 2018, Kim, 2017, Tsatsou, 2018), however the simplest interpretation of literacy is always associated with the ability of the person to read and write while computer-related literacy is more about acquired technical capabilities. At the same time digital literacy is considered as an umbrella concept composed of significant skill clusters, such as:

"ICT literacy – a set of user skills that enable active participation in a society where services and cultural offerings are computer-supported and distributed on the Internet;

Technological literacy (previously called computer literacy) – a deeper understanding of digital technology and comprising both user and technical computing skills;

Information literacy – a key aspect of Knowledge Society, the ability to locate, identify, retrieve, process and use digital information optimally" (Digital literacy in education. Policy brief, 2011, p. 2).

The theoretical umbrella of digital literacy may be associated with 21st century literacy, computer literacy, Internet literacy, online reading comprehension, information and communication technologies and much more. Digital literacy is rightly referred to the 21st century new literacy as:

"it includes the new skills, strategies, dispositions, and social practices that are required by new technologies for information and communication; it is central to full participation in a global community; it regularly changes as its defining technologies change; it is multifaceted and the understanding of it benefits from multiple points of view" (Osterman, 2012, p. 135).

It seems that the definition offered by Y. Eshet-Alkalai (2004) may be considered as a working one within this paper – "digital literacy is a large variety of complex cognitive, motor, sociological, and emotional skills, which users need in order to function effectively in digital environments" (Eshet-Alkalai, 2004, p. 93).

It is obvious that continual development of digital technology in the 21st century significantly affects educational process and digital literacy may be already considered as a "gate skill". It is proved by the fact that today professional computing skills are highly demanded when applying for any job. Digital literacy is acknowledged by UNESCO as a "life skill" (Digital literacy in education. Policy brief, 2011, p. 2), so special attention should be paid to its formation and development across the lifespan (Chigisheva, 2018a, Chigisheva, 2018b, Chigisheva, 2018c).

However, certain shortage of adequate learning products is deeply felt on Russian education market. For many reasons, universities have to develop their own products to satisfy the situation-specific requirements and to ensure that current curricula needs are duly met. Young academic and research staff is administratively encouraged to participate in the process, thus raising their own functional potential (Chigisheva et al., 2017).

The present paper considers a product developed by the teaching staff of Southern Federal University. The blended course "Famous People" (Soltovets & Apryshko, 2010) illustrates the challenges and opportunities of practical foreign language teaching. The study focuses on experience of developing learners' digital literacy as a secondary informal learning phenomenon.

## DEVELOPMENT.

### Discussion.

Needless to say, techniques of computer-based learning have already contributed significantly to language teaching in general and developing various learning skills in particular. However, the reality of modern formal teaching routine is a landscape dominated by gaps, rather than bridges. One of the most obvious of them is a gap between the opportunities provided by e-learning and the learners' incapability to make the most of them. Ironically, the unique features which are to open new horizons for students, can act as blinders.

Digital literacy is understood as being intrinsically enjoyed by all learners, who are, in their turn, invariably perceived as "the ne(x)t generation". Beyond the speculations on the level of digital literacy among academic staff, the fact calls for both methodological reflections and practical steps. It is also worth noting, that apart from so-called "quantitative analysis techniques" few non-IT related syllabi tend to include subjects dealing with digital efficiency development. Most tertiary institutions would offer their students some formal training for certain ICT skills, for instance using Power Point for presentations or Excel for data processing. Obviously, that is quite far from the way digital literacy is most commonly interpreted: 'ability to use ICT to find, evaluate, create, and communicate information, requiring both cognitive and technical skills' (ALA, 2011).

Some researchers understand digital literacy as mastery of knowledge and skills within 3 domains. Alongside with practical and cognitive domain, they recognize the importance of sociocultural domain, 'encompassing the ways in which technologies are shaped by and reflect the sociocultural contexts' (Smith et al., 2018). Therefore, e-courses for ESL teaching can undeniably provide most natural environment in terms of sociocultural context. Being placed in the virtual medium, students find themselves in the sociocultural community where foreign language is both meaningful and instrumental. Thus, communicating in virtual environment of autonomous fellow-learners paths the way to informal development of digital expertise.

Ideally, the Internet provides access to an infinite number of courses to suit any learning objectives. In fact, though, with all the variety of interactive educational products being promoted and offered in the education industry, teachers experience shortage of purpose-tailored decisions.

Demand for the course-specific products, especially for multi-level and multi-discipline groups, is increasingly high. That was the reason underlying development of a blended course "Famous People" for Southern Federal University students. The course has been taught to the second, third, and forth year students of the Humanities whose level of English for general purposes was assessed as intermediate (or higher). It has been delivered for a period of 5 years, evolving from an interactive multimedia programme through computer-assisted course into the present form of a blended learning course. Its regular length has varied from six to twelve weeks, depending on the faculty curriculum policy and the group dynamics. It has never been a part of major courses, being offered as elective or optional course at different stages of its development.

**Results of the project.**

The course consists of 6 modules, each dealing with personalities within a certain area: "Royalty", "Heads of States", "First Ladies", "Politicians", "Women in History", "Spiritual Leaders" (fig.1). The categorization is purely conventional, reflecting regular topicality of the textbooks.


**Fig. 1. - The content page of the course, as presented in the original multimedia programme.**

It should be noted, that the primary purpose of the course is to develop skills of oral and written communication in English language. Nevertheless, a number of secondary objectives were intended while designing the course. Increasing student's ICT awareness has been seen as an indispensable prerequisite for a comprehensive learning product. The idea behind the course is to make certain skills instrumental for engaging learning through fostering group participation and experience sharing.

The course is aimed at encouraging learners to meaningfully select, evaluate and use information in a variety of sources available in the Internet. However, it should not fail to be mentioned, that originally the course had been more computer literacy-oriented, focusing on some basic software knowledge. So, the first "pilot model" had resembled more of a hyperlinked e-textbook rather than a full-fledged course. Since then it has undergone considerable changes.

Each teaching iteraction has been suggesting new practicalities. The topic and structure of the course has survived, while other ingredients, including its content, have transformed into its present form. The form of teacher-students and student-students interaction is the sphere where alterations have been most dramatic. In contrast, the form of the material presented has not changed much. The navigation techniques remained untouched in general, being only slightly improved (fig.2).

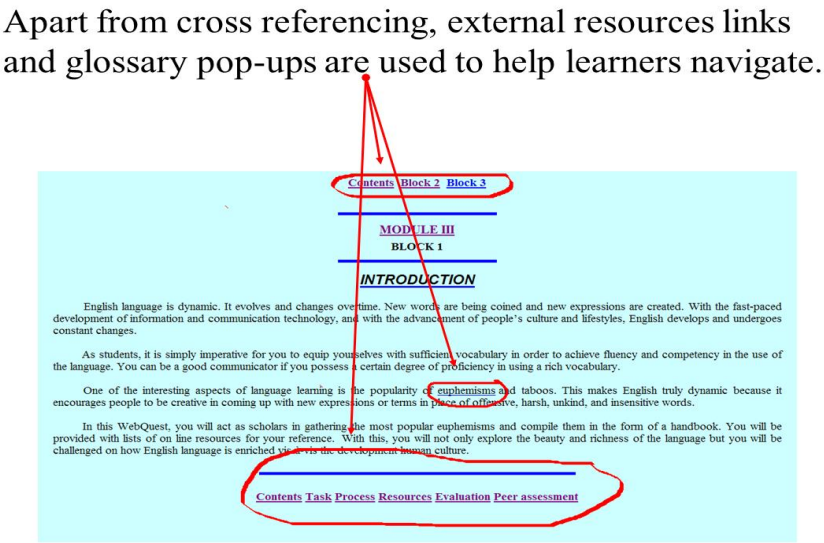


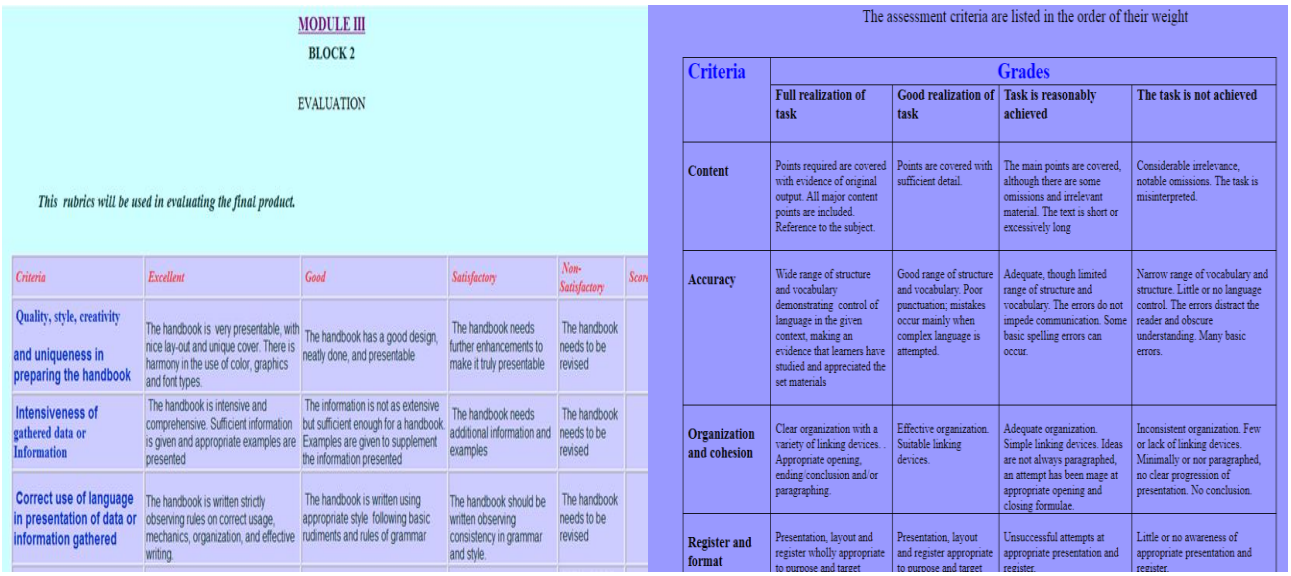

**Fig. 2. Example of hypertext navigation system in the computer-assisted course.**

Every module is divided into two learning units, so-called “blocks” of information, according to the number of personalities studied. Thus, a block is the smallest logical learning unit designed in a similar repeated pattern of a week-long learning loop.

A set of additional materials, such as extra reading, self-study cases, recommended reference resources, or bio video of documentary or fictional character provide for an extended two-week period if the topic is of special interest for students or teacher. However, as it is often the case with e-courses, the format indulges to a flexible learning pace. Setting a comfortable tempo which suits individual needs and students’ learning types can help them make the most of the course. The structure of each block partly simulates the structure of a customary unit in most textbooks commonly used in SFU. The course in general, as well as each of its components, uses a bedside approach.

Opening up with the text-based input of information as a basis for further activities, it encourages learners to explore the topic step by step through a system of exercises and tasks to finally cooperate as a team sharing the knowledge gained in the process. Naturally, the proportion of autonomous learning is growing towards the final stage, to become the ground for the guided group work within the final assignment. What is more important, the element of computer-assisted individual learning is also increasing gradually, leading a student from mechanic drilling through search-and-analyze stage to creative cooperative performance.

The problem of transparent and reliable assessment procedures emerged as the course assignments grew into something more complicated than embedded self-checks and tests. As a result, a system of rubrics was offered by the course authors to provide learners with simple and clear criteria for self-assessment and peer review. The system greatly helped develop learners’ confidence and relieved a teacher of arbitrator role. By the end of the courses, students took active part in adding up criteria on the quality of work related to the information handling (fig. 3).



MODULE III

BLOCK 2

EVALUATION

*This rubrics will be used in evaluating the final product.*

| *Criteria* | *Excellent* | *Good* | *Satisfactory* | *Non-Satisfactory* | *Score* |
|---|---|---|---|---|---|
| Quality, style, creativity and uniqueness in preparing the handbook | The handbook is very presentable, with nice lay-out and unique cover. There is harmony in the use of color, graphics and font types. | The handbook has a good design, neatly done, and presentable | The handbook needs further enhancements to make it truly presentable | The handbook needs to be revised | |
| Intensiveness of gathered data or Information | The handbook is intensive and comprehensive. Sufficient information is given and appropriate examples are presented | The information is not as extensive but sufficient enough for a handbook. Examples are given to supplement the information presented | The handbook needs additional information and examples | The handbook needs to be revised | |
| Correct use of language in presentation of data or information gathered | The handbook is written strictly observing rules on correct usage, mechanics, organization, and effective writing. | The handbook is written using appropriate style following basic rudiments and rules of grammar | The handbook should be written observing consistency in grammar and style. | The handbook needs to be revised | |

The assessment criteria are listed in the order of their weight

| Criteria | Grades | | | |
|---|---|---|---|---|
| | **Full realization of task** | **Good realization of task** | **Task is reasonably achieved** | **The task is not achieved** |
| **Content** | Points required are covered with evidence of original output. All major content points are included. Reference to the subject. | Points are covered with sufficient detail. | The main points are covered, although there are some omissions and irrelevant material. The text is short or excessively long | Considerable irrelevance, notable omissions. The task is misinterpreted. |
| **Accuracy** | Wide range of structure and vocabulary demonstrating control of language in the given context, making an evidence that learners have studied and appreciated the set materials | Good range of structure and vocabulary. Poor punctuation; mistakes occur mainly when complex language is attempted. | Adequate, though limited range of structure and vocabulary. The errors do not impede communication. Some basic spelling errors can occur. | Narrow range of vocabulary and structure. Little or no language control. The errors distract the reader and obscure understanding. Many basic errors. |
| **Organization and cohesion** | Clear organization with a variety of linking devices. . Appropriate opening, ending/conclusion and/or paragraphing. | Effective organization. Suitable linking devices. | Adequate organization. Simple linking devices. Ideas are not always paragraphed, an attempt has been mage at appropriate opening and closing formulae. | Inconsistent organization. Few or lack of linking devices. Minimally or nor paragraphed, no clear progression of presentation. No conclusion. |
| **Register and format** | Presentation, layout and register wholly appropriate to purpose and target | Presentation, layout and register appropriate to purpose and target | Unsuccessful attempts at appropriate presentation and register | Little or no awareness of appropriate presentation and register |

**Fig. 3. Assessment rubrics.**

Throughout the course, a teacher has had to perform the functions of a curator, facilitator and moderator, guiding students' progress and providing them with feedback. The utmost importance of such support has been proved by experience. Students were given guidelines on keeping in contact with the instructor, as well as the coursemates. At the first stage learners tend to rely on teacher's support too heavily, looking for appraisal or further instructions upon completion of each learning cycle.

The first several weeks were also characterized with uncertainty in their own performance, both in terms of language acquisition and digital expertise. It was not uncommon for students in this period to seek for detailed "manuals" and "how tos".

Plain exercises based on matching, transformation of gap filling was done eagerly and worked quite well for smooth course progress. Learners tried to shirk from all kinds of tasks involving group participation or non-directed learning. Course participants preferred e-mailing in a "teacher-student" regime; otherwise, they just shelved all questions, saving them for the next face-to-face class. Surprisingly, quite few questions were about the "correct" way of using the programme or software, while many students wondered what tools or software they were supposed to use while doing the assignment.

Having no direct answer or an example to comply with made them feel intimidated and reluctant to pursue studies. Therefore, a system of scaffoldings was introduced to help students gain digital learning independence by consecutively facing them with increasingly challenging tasks. As all of them were supplied with banks of resources and links to explore, samples of other students' projects were gradually added. The range of data sources and their digital variety was also widening step by step. Thus, the need for teacher's assistance was weakening with every week, as students made themselves familiar with the means and forms of learning activities.

Another important factor related to the process was learner-to-learner interaction. Indeed, teamwork has always proved best in many aspects of language teaching. It is felt even more important for all kinds of informal digital competencies development.

Teaching students how to deal with digital information has never been viewed as an end in itself. Nor has it been a core of an academic course at SFU. What is more important, it is hardly worth trying for a teacher to keep up with the generation of those figuratively named "digital natives". So, after having struggled enough for control over the process, a different approached was offered. A focus was made on cooperation rather than competition.

Apart from encouraging students to explore and experiment on their own, the teacher tried to nurture intragroup communication in all the ways possible (ideally using both asynchronous and synchronous techniques). Natural shyness of some students and their fear of making mistakes in English hindered collaboration at the first stage, but gave way to genuine excitement as soon as some tangible results were achieved. The first grouping is planned at the early stage of the second module, when students have to deal with the assignments that require sharing. A teacher begins with splitting the students into small groups of two or three, regardless of their levels or personal attachments. This is usually met with some kind of revolt, partly because virtual communication is never easy in foreign language. However, with due attention from the facilitator, later the process runs smoothly by the end of the fourth module, culminating to the final group project.

A gentle start is essential to any kind of technology-related teamwork. Learners need time to get a sense of what they have to deal with. Equally important is allocating some time for group mates to know each other. As soon as they are able to interpret and navigate the tools offered by the teacher, students are eager to share their insights with the course mates. By this time, they should know each other well enough for natural communication. So, the ice-breaking activities planned for face-to-face lessons within the first module can significantly ease the tension of being thrown into linguistically and electronically "alien" environment.

The closing assignment of the module involves some peer-review and cross data checking. Then forced grouping is carefully introduced. The group size can vary, but tend to rise slowly, until a group of 5 to 7 students feel comfortable working as a team. Practice has shown that within the blended language learning course a group of larger sizes may experience communication misfire. A period of 12 weeks, which is the expected average length of the course, might be insufficient for building truly coherent community allowing for significant size fluctuations. It also proved helpful to allot learners some share time and space for intra-group face-to-face classroom activities, like brainstorming or exchanging ideas.

Paradoxically, pre-arranged "sittings" of such type appeared crucial for digitalizing further learning experience and broadening its horizon. This was the moment when the first traces of informal learning outcomes became visible. Enthusiasm about the project success encouraged students to readily share knowledge and skills regardless of the topic being discussed, be it desirable channels of group communication, principles of fact checking or software issues. While debating, the group members tried to incorporate their background IT knowledge to advertise their ideas. As the students reported later, they did not suffer from the feeling of being assessed by the teacher or looked down by the peers. The burden of dealing with avalanche of questions and requests was partly removed off the teacher's back, since students were willing to jump in with suggestions and technical recommendations more than often.

Diversity in forms and types of assignments provided an opportunity for all course participants to enjoy the role of experts. Teacher's support in issues of digital media was still necessary, but seldom looked for. This role was also gladly played later, in social network communication and online activities. With time students learnt to shoulder instructing and correcting responsibilities, thus turning a group into some sort of self-regulating system.

**CONCLUSIONS.**

The features of the blended course "Famous people" described above suggest that informal learning can become a powerful booster of digital literacy. Increase in students' digital confidence did not come as a surprise while teaching the course, though it had not been among the aimed outcomes at the stage of course design.

In the first years of teaching the course through interactive multimedia programme which had been meant to meet the needs of History students of SFU, its potential was clearly seen in having raised the learners' computer expertise. The promise was later fulfilled by introducing collaboration and experience sharing. Unforced communication prepared the ground for experiential learning.

Placing a greater emphasis on group work helped to build a learning community where new forms of tackling information were welcome. Surprisingly, face-to-face group interaction proved crucial for ICT knowledge exchange among learners, at least as the initiatory step. Such classroom events, together with accurate teacher's guidance, paved the way towards building a self-regulated community of learners where digital competencies were demonstrated and taught as part of other meaningful activities. Creating a relaxed and inviting environment where learning can become situated is seen as one of the priorities for further course development.

In the present academic settings, where massive cuts in classroom hours have intensified general tendency towards learner' autonomy incidental learning, becomes a factor to be aware of. It can hardly be planned and controlled, but it might be taken into account and facilitated.

**BIBLIOGRAPHIC REFERENCES.**

1. ALA (America Library Association) Digital Literacy Taskforce (2011): office of information technology. Accessed: 2 March 2019. Retrieved from: http://connect.ala.org/files/94226/what%20is%20digilit%20%282%29.pdf
2. Chigisheva, O. (2018a). Digital literacy gaps: are they critical for 21st century researchers? The European Proceedings of Social & Behavioural Sciences, 154-163. https://dx.doi.org/10.15405/epsbs.2018.09.02.18
3. Chigisheva, O.P., Soltovets, E.M., Bondarenko A.V. (2017). Functional research and scientific productivity indicators of young researchers. Baltic Humanitarian Journal, Vol. 6, 4(21), 429-433 (in Russian).
4. Chigisheva, O.P. (2018b). Researcher`s digital literacy in Open Science Digital literacy of the researcher. Azimuth of Scientific Research: Psychology and Pedagogy, Vol. 7, 4(25), 241-244 (in Russian).
5. Chigisheva, O.P. (2018c). The role of research literacy in the professional activity of the scientist. Baltic Humanitarian Journal, Vol. 7, №3(24), 319-322 (in Russian).
6. Digital literacy in education. Policy brief (2011). Retrieved from: https://iite.unesco.org/publications/3214688/
7. Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. Journal of Educational Multimedia and Hypermedia, 13(1), 93-106.
8. Hallam, G., Thomas, A., & Beach, B. (2018). Creating a Connected Future through Information and Digital Literacy: Strategic Directions at The University of Queensland Library. Journal of the Australian Library and Information Association, V. 67(1), 42-54. DOI: http://dx.doi.org/10.1080/24750158.2018.1426365

9. Kim, S. (2017). Literacy skills gaps: A cross-level analysis on international and intergenerational variations. International Review of Education, V. 64, 85-110. DOI: http://dx.doi.org/10.1007/s11159-018-9703-4

10. Osterman, M.D. (2012). Digital literacy: Definition, theoretical framework, and competencies. In: Proceedings from the 11th Annual College of Education & GSN Research Conference. Miami: Florida International University, 135-141.

11. Smith, E., Kahlke, R. & Terry, J. (2018). From Digital Natives to Digital Literacy: Anchoring Digital Practices through Learning Design. Conference paper. https://www.researchgate.net/publication/329179333_From_Digital_Natives_to_Digital_Literacy_Anchoring_Digital_Practices_through_Learning_Design Accessed: 1 March 2019.

12. Soltovets, E., & Apryshko, E. (2010). Famous People. Registration Certificate №19493 by Federal State Unitary Enterprise Science and Technology Centre, dated 21 June, 2010.

13. Tsatsou, P. (2018). Literacy and training in digital research: Researchers' views in five social science and humanities disciplines. New Media and Society, V. 20(3), 1240-1259. DOI: http://dx.doi.org/10.1177/1461444816688274

**DATA OF THE AUTHORS.**

1. **Elena Soltovets.** Senior Lecturer. Department of English for Humanities. Institute of Philology, Journalism and International Communication. Southern Federal University. Rostov-on-Don. Russia. E-mail: emsoltovets@sfedu.ru

2. **Oksana Chigisheva.** Candidate of Pedagogical Sciences. Associate Professor. Department of Education and Pedagogical Sciences. Academy of Psychology and Pedagogy. Southern Federal University. Rostov-on-Don. Russia. E-mail: opchigisheva@sfedu.ru

3. **Denis Dubover.** Candidate of Pedagogical Sciences. Associate Professor. Acting Dean. Faculty of Mediacommunication and Multimedia Technologies. Don State Technical University. Rostov-on-Don. Russia. E-mail: ddubover@ya.ru

**RECIBIDO:** 6 de abril del 2018. **APROBADO:** 18 de abril del 2018.