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***OPEN ON-LINE COURSE “CONTENT CURATOR”***

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*Content curating is a new activity (started in 2008) of qualified net users and other specialists for working up with large information amount in order to represent its possibilities for social net users needs. To prepare content curators the distance course was developed and proposed for examine the functions, methods, approaches and tools of curator. Course conducting showed a significant relationship learning progress from the available personal learning environment and the ability to process and analyze in necessary information. The course students proposed to conduct a preparatory course in order to display the subjects that are connected with an information search and definition of its authenticity.*

**Keywords:** *content curator, social services, methods, functions, distance course.*

**1. Introduction**

We are situated now under a permanent information squall that comes from different social nets [1]. For example:

- 72 hours of video are loading to YouTube every minute;
- 340 million tweets are translating daily;
- 25 milliard content ones are created on Face book monthly;
- During one day 250 million photography-cards are loaded on Face book and 294 milliard letters are posted.
- On 2010 there were 1, 2 zetta byte of numeral information at Google search system. After one year the size increased exponentially to 1, 8 zetta bytes (zetta byte is equal to trillion gigabytes or it is the 24th order number).
- For two years user number of Pinterest service exceeded 10 million, that made this service the most quick growing Web-service that achieved 10 million visitors monthly in USA.

The exponential development conditions of net information amount and net technologies appearance caused the necessity to know-how with information and to make use of it in a current work.

In the West in 2008 there was appeared such term as “a content curator” that usually is compared with the museum inspectors (curators) [2]. Museum curators don’t create any content however they keep their hands on the tendencies’ pulse, listening themselves to visitors discussing and so they could find resources that resound well with visitors’ interests. Curators are in searching of products and artificial facts that could be connected with such subject or theme and then organize exhibition.

**2. About content curator**

A content curation is a process of categorization for a large amount of content and a presentation it at an organizational function for a concrete subject domain (niche). Especially this work is important in the time of Massive Open Online Courses (MOOCs) organization because of its basing on the newest information that didn’t pass through generalization stage yet. Just here an important role plays as information quality so a curator who makes the processing as transparent so sensible and smart. We can propose here some other content curation definitions.

Content curation is one of the Marketing content forms [3]. It includes in a content gathering (collecting) that has treatment to the fixed niche and added value in a form of personal thoughts or

ideas and experience. Than the more content would be net so much organization would take itself a role of its interpreting.

Content curation [4] is an activity of a constant looking for {searching}, selection and widening the best and most corresponding ones to online content and other interpret-resources according for concrete theme and concrete auditorium's needs.

Curation composings [2]:

- Social networks: For the most simplification of their form content curation is an interchange with content in social nets.
- Aggregation: Collecting and interchanging by a corresponding content. It makes free and individual workman from a content searching necessity.
- Filtration: A selection of the most actual and valuable information.
- Scope: An advantage of a wide tendency by comparison with content.
- Collages: An association of two or more joined content elements for to shape a new report.
- Chronological scales: Content organizing in chronological sequence for displaying an idea evolution.

Content curation couldn't replace internet-publications and Web-searching. A content curator provides [5]:

- Clearing up. Elaboration and clearing up of disorder is a very valuable service that content curator gives for auditorium.
- Value supplying.
- Confidence strengthening. When content curator gives his auditorium a qualitative content he promotes to form the confidence.
- Taking up a position for him as a leader.
- Improvement SEO.

A question about content curation ethics is important. Content curation's good name and confidence is one of the richest qualities that determines a future career, therefore it is so important to make use of a strange content correctly [6].

Content curation has to take in only carefully picked out parts of content, adding of corresponding commentaries or comprehension of subject or else apportioning the separate parts, and always with content author indication without plagiarism elements (foresees a sole with reference on origin in the text and also data about information author and make using of reblog and retweet).

Content curation is important for education and learning [7] because of next causes:

1. Information overloading that needs of a compulsory reorganization. Student must be studied to learn for to know where he will look for something, and what is a main and actual for learning or achieving: some purpose or problem decision. Just therefore digital literacy is of such grownup significance. It provides some tools for information evaluation, filtration and putting in order by the best effective ways.
2. Growing number of open resources. A space of open possibilities for learning grows quickly and there is a requirement in recommendations for students how to choose the best suitable resources for effective achievement the self-goals.
3. Information world is reformed into dynamic one. Amount and complication of accessible information grows quickly, out-of-date conceptions change and so it is important to direct efforts towards searching, monitoring and renewal that are the most actual information origins, and to provide youth by tools for realization of their problems. Content curator uses these skills and approaches for achievement his objects. That's why curator skills may be in all probability will become of key features for future teachers.
4. Student training for a real work. Whereas academic universe from primary school to universities at whole is organized by subjects, the real one is itself a complex situational net.

Curating brings in education the training elements for real activity by displaying new relations between different information elements.

5. Curating is a new searching. The search results become the most big unsatisfactory because they keep in a large amount of “interference” which authenticity is difficult for checking. In other words, explorers, teachers and managers consider as better to turn to trusted curators from concrete information fields but don’t trust in traditional searching.
6. The labor market is changing quickly. There are 17 million of college final-year students whose working-places don’t ask of higher education<sup>6</sup>. It is more than 30% of college final-year students of USA. Content curating proposes the practice approaches for students with new skills training.
7. Alternative systems of certification. Alternative certification systems can demonstrate and evaluate the personal skills without necessity of visiting learning courses, education and new text-books paying and exam paying. The training cost for certificated learning program is very high, while a real importance of those courses on Labor-Market continues to decrease quickly. For organizations that are developed it is expediently to switch over studying and certification to curating of talents, educational resources, forming of content curator’s skills.
8. Teacher and lecturer can now curate their personal manuals. Lecturers begin at present to curate their manuals at the expense of utilization the great amount of open learning Internet materials and tools amount extending.
  - Education Market is opened for competitors. At present there is a great amount of free and easy of access digital tools, web-services and additions for creation, search, edition and publication for courses, educational supplies, hand-books on any subject. Content curators may obtain recognition as a specialist of definition, selection and organization the best open resources for concrete needs. Someone could select, organize great amount of open learning courses and materials by help of learning process curating for concrete auditorium and needs.
  - A growing demand for reliable management of learning and learning program content. Search and option of high-quality open educational resources. When educative propositions become wider the necessity of finding the suitable and reliable resources is growing up. For commercial organizations content curation allows: [8]: to make better personal training and management quality, to get the content origins.
  - Curata Firm at 2012 after supervising more than 400 marketologists [9] made known that a prime majority of them use a content curating as a key component of personal strategy for content marketing. 95% of respondents said, that they have discharge content curator’s functions during last six months but some of them did that in really (subconsciously), because they didn’t know such term.
  - Here are some key conclusions of that research:
  - 56% marketologists who took part at questioning informed that a qualitative content searching is the widest problem of content marketing. Marketologist looked at content curating as a searching method of actual information into disorder (chaos).
  - Nearly 85% of interrogative persons declared that main object of content curating as a problem of leadership. Giving a qualitative content breeds could position themselves as leaders at their space. After that confidential respects are established and perspectives appeared.

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[http://www.insidehighered.com/views/2011/01/20/vedder\\_going\\_to\\_college\\_isn\\_t\\_a\\_smart\\_decision\\_for\\_many\\_young\\_people](http://www.insidehighered.com/views/2011/01/20/vedder_going_to_college_isn_t_a_smart_decision_for_many_young_people)

- Social platforms such as Facebook and Twitter are method to get news after question. People suppose on social media as resource of actual and well-timed information more quickly.
- Social media tools become more popular with help to marketologists to define correct origins and to find a proper content. Nearly 79% of interrogated marketologists point at social media as absolute service for news searching.
- Social media became the way of content widening in Internet and one of effective channels for marketologists. Owing to content curating they can quickly and easily get information in a social domain.
- 65% participants indicate on increasing SEO as one of the main content curating object.

A content curating may be will become a new activity of scientists in a higher education field but in front of that it is necessary to consider such questions as:

- What skills are necessary for effective content curators?
- How must content curators be ready to similar activity?
- How do we adapt systems of education management: to arrange a program provision of organization for support of this direction?

Adducing of questions with regard to appearance of new kind of activity and net on 2008 shows to curator of content that on this stage Internet users can become content curators themselves. Now there is no system for training of content curators everywhere. Therefore working up of program and training process for content curators are topical.

### **3. Arrangement of problem**

This paper observes a hypothesis (as a possible exploring direction and following development) that worked up yet distance course “Curator of content” is capable to get ready students for their work up with large sizes of information found in net and to manage a forming the necessary content curator’s skills for students with appropriate basic training in information technology. The basic training level, strengths and weaknesses (fragments) of a distance course as well as relation of masters to it are necessary for determine a quality level in a distance learning process.

It is necessary as well to use constructivist and connectivist approaches for activity organization and learning managing during education process.

Program of a named distance course consists of some following topics and themes and each one of them has only one week for working up with studying and learning.

A distance course program is pointed below:

1. Curator of content
2. Characteristics and competences of curator.
3. Curator of content and his role at electronic library
4. Information search in science-metric bases
5. Personal learning environment and personal learning network
6. Curator of content and his work methods
7. Curator of content and his tools
8. Fields of using Curator’s works up.

This course is built with using constructivist and connectivist approaches. At the first approach there are formulated objects of learning and concrete enumeration of tasks for students and their achievements. The second approach proposes to students great amount of references on instructed materials with proposition to take part in process of forming net for discussing.

Course is oriented on a wide group of participants from students to high level specialists. Course object in accordance with Bloom taxonomy for different categories of audience may differ: it is collecting and orders such activity kinds: change of messages – at remembering level; messages classification – understanding level; applying of materials – utilization level; training for surveyings – analyzing level; synopsis and analytic minutes – evaluating level; training for analytic minutes and a short review about one fragment of personal net with comments – creating level. Taking into

account the newness of this direction course includes characteristics and functions of content curator, later it is foreseen to deep these figures at the time of discussion in learning process.

There are ten skills for curator of content [10], they will be discussed at the time of learning process in the course:

1. Creation of senses: ability for determination of a deep meaning for learning objects, interesting, sense of surprise, wish for understand something new and unknown and share this find with others.
2. Abstract thinking: ability for transformation of great data sizes into abstract concepts and understanding them at the time of thoughts; digital literacy – analysis and data organization for better understanding.
3. New media – literacy; ability for critical evaluation and content development, using of new media-forms;
4. Transdisciplinarity: literacy and ability for understanding the conceptions of several disciplines;
5. Cognitive management with loading: ability for distinguish and filter of information in conformity with its importance and understanding of possibility for strengthening of cognitive functions because of different tools and methods being adopted.
6. Social intellect: possibility to link up to other associations; stimulating of reactions and co-operation when it is desired;
7. Adaptive thinking as a result of curating process, stages of synthesis and evaluation;
8. Designing thinking: ability to develop tasks and working processes to receive desired result, is based on principles of projection (methodology, ideas generation, new decisions, qualifying);
9. Cross-cultural competence: ability to work in different cultural environments;
10. Virtual co-operation: ability to productive work as a member of virtual command.

A course's student as a future Curator of content discharges next functions [11]:

- Searching function. Determines a place for searching information. Selects tools for searching information. Working up searching of information in different sources, environments and bases.
- Analytic function. Analyzing material (information), picks out relevant one. Checks up it for authenticity, actuality. Controls holding on copyrights of this material. Separates main thought of material.
- Aggregating function – publications. Classifies material on definite parameters. Places material in definite bases, on sites, platforms. Extends material in social nets.
- Creating function. Abstracts obtained material. Comments obtained material. Supplies initial material with self-makings. Creates on basis of found material a new one.
- Developing function. Affords adding messages to presented material. Proposes ways of development curation with given material. Recommends other people (curators) to attach net.
- Researching function. Researches works of other curators, scientists, net users, includes their self-makings at own activity, attaches new knots to own personal learning net. Researches new tools possibilities for curating of content and apply them in his work.

Working cycle of content curator is composed from selection of objects, definition of subject for curation, search and work up with information, separation of meanings, extending (Figure 1).

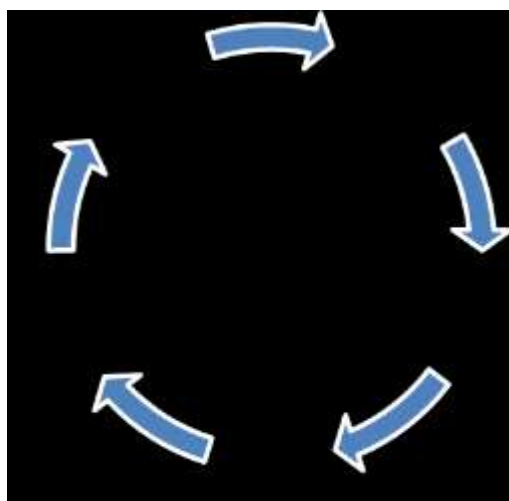


Fig. 1 The cycle of content curator's work (<http://www.bethkanter.org/content-curation-101/>)

Everyone of these phases in cycle curator uses his peculiar methods of work. These methods can be as effective, so less effective ones. Content curators with high qualification have well known methods for processing with information, for example, outlining, training of theses, synopses, analytic reports, compression of information by help of graphic forms, etc.

Content curator has to orient into information resources (including open access), search systems of common and specialized prescription, strive for to be known with science and metric researching, define authenticity and scientific value of information.

One of course tasks includes definition of effective work methods, especially linked with use of cloud technologies. It is the most characteristic that work methods of content curator have to base on the present – day – cloud technologies that are directed on processing with great information extents (Scoop.it, Storify, Pearltrees), knowhow of use crowdsourcing and developed personal net.

There are defined based cloud technologies in the course, that also can be adopted by help of tutorials placed on YouTube. They are:

1. Twitter – for information selecting by help of observation for known content curators and specialists at concrete subject field;
2. Paper.li – automatic information collection.
3. RebelMouse – information about content curator processing from different cloud technologies;
4. Scoop.it – electronic plan newspaper of content curator
5. DIIGO – tool for commentary of internet-resources and its propagandising in net.
6. Evernote – note-book of content curator.
7. Symbaloo, Netvibes – aggregators for content curator's information flows.
8. Pinterest – creation of plan collection of graphic elements, Students of course have to skill on creation of blogs, to work in social nets, Facebook, LinkedIn, to be members of common practice.

Besides of it there is foreseen wide selection of specialized content curator tools in course for familiarising and using the most convenient from them for students' work.

#### **4. Analysis of learning process in open distance course**

To the first pilot course 50 persons had been written. From them were 31 person – Russia, 3 persons – Byelorussia, 15 persons – Ukraine, 1 person – Latvia. Previous training of content curator includes presence of personal learning environment and personal learning net. Tools, presented on Figure 2 are those which utilize course members. It should be mention that on the first positions there are social nets, but no tools.

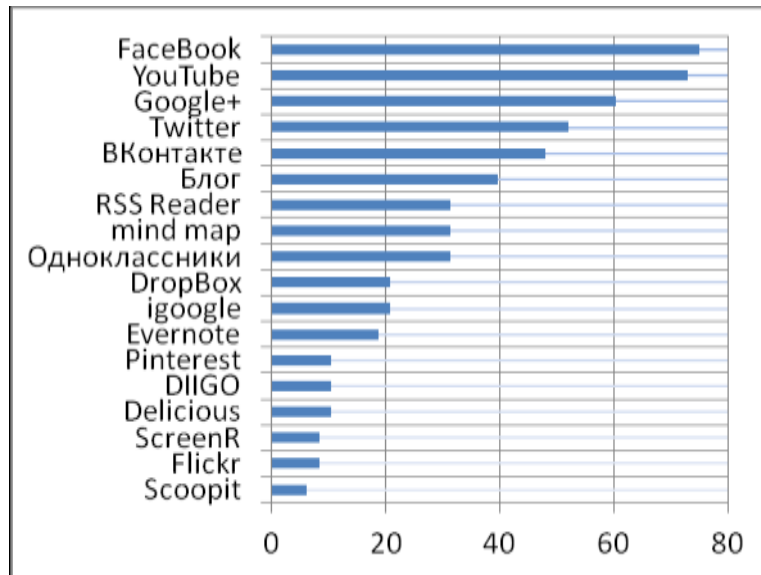


Fig. 2 Social services that are used by course members

An activity index of students is undoubtedly their taking part at course's forums/

At the first forum of course "Acquaintance" took part 36 persons, after some weeks at course were remained only 18 active members (36%). It completely- reply to results of entrance form where most of questioned called as an object "acquaintance with new direction, new colleagues, desire to understand objects and content curator's tasks", that is clear – so- called learning didn't planned.

Relative frequency distribution of used social services had shown on Figure (Fig. 3).

It should be mention that it was a pilot course and there were lecturers and academics in it mainly directed on innovations. Therefore a nature of distribution curves hasn't change. It should be noted that the number o was too small (started – 50, finished 19 persons). 10 members evaluated Twitter positively (service that generates the most power information flow in net at present stage) as one of main tools for curator. Two members have negative opinion of it.

Course learning finishes with defending final-work by personal subject for curator.

To the second recruitment at open distance course "Content curator" were subscribed 150 students for the most part from Ukraine and Russia. Among them were librarians (20%), lecturers (42,7 %), teachers (7,3 %), students (among them-were 6 magisters of NTU "KhPI" for whom this course was planned, 8%), methodologists (9,3 %), managers of education establishment (12,7 %), PhD (23,3 %), women (86,7 %), men (13,3 %). Experience at education for teachers and lecturers the most was more than 10 years (61 %).

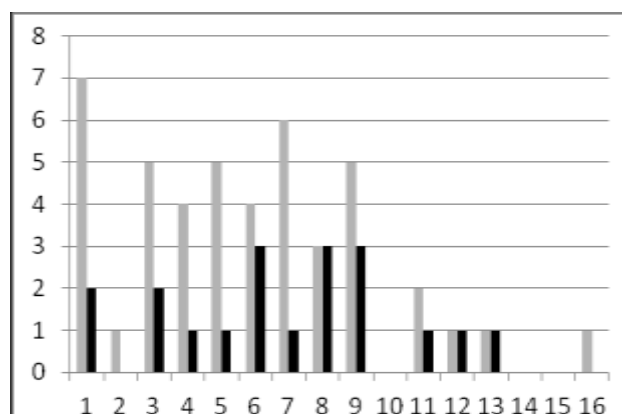


Fig. 3. Frequency tools distribution course members before beginning of learning (grey filling in) and in the middle of course (black filling in).

30 person (20 %) carried out course program in full and got certificate, among them librarians (23,3 %), lecturers (50 %), teachers (3,3 %), students (20 %), methodologists (3,3 %), PhD (33, 1 %), women (80 %), men (20 %).

Practically nearly all students didn't know certainly how use the base tools of content curator (Twitter – 39 %, Evernote – 21 %, DIIGO – 7 %, Scoop.it – 6 %, Netvibes – 4 %) and so number of popular tools was limited.

It should notice, that at course beginning 85 person have acquainted with course program and sent their reports. From week to week amount of active students decreased and at last became stable at the fifth week with 30 persons who finished their courses successfully. 42 beginners (30 %) left course because of low qualification. Also 20 qualified persons left course for unknown reason. May be, they didn't have enough time.

12 % of students spend at learning 1 – 3 hours weekly, 24 % – 3-6 hours, 24 % – 6-8 hours and 36% – more than 8 hours, that shows high level of tension and loading.

To peculiarities of learning process it should take in utilization of blogs for report on carrying-out work stages, conduct of weekly webinars. As a rule, webinar was constructed from two parts. At beginning new theoretic information had been done and then analysis of fulfilling weekly, tasks was going on. Webinar recording was accessed for all students. After course finished access to materials was opened and 20 students took such possibility for last three months.

Below results of questioning course students are given:

**What did you like in open distance course?**

- Combined work “beginners” and advanced users of Internet.
- I liked public results of work of other course members.
- Freedom in selection the time for learning, self-selection of material form, intellectual loading for self-sensible work with actual questions.

**What was difficult for you at open distance course?**

- Big amount of information on English.
- At course beginning there was no clear understanding?

**What parts are necessary for excluding from distance course or on the contrary adding to it?**

- It should to detail separately subject “open educational resources”.
- It is necessary to begin with–introductory course.
- It is necessary part about peculiarities and demands to process of information searching; how exactly can somebody search correctly and systematize inquiries?
- Recommendations for evaluating authenticity for information found in Internet network?

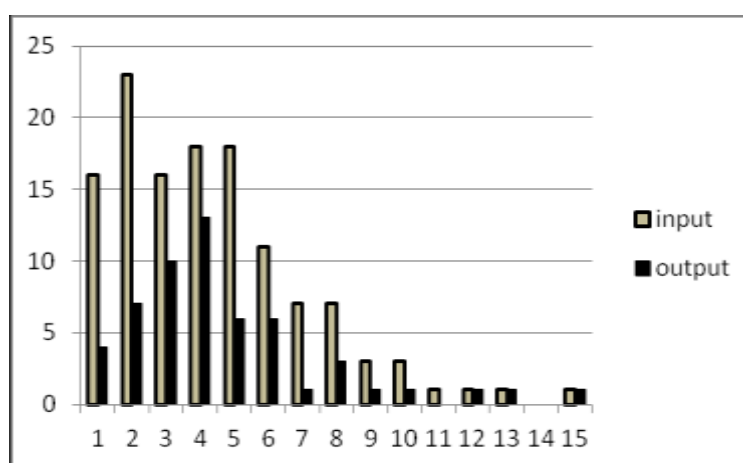


Fig. 4. Frequency course numbers distribution corresponding to utilized tools before beginning of learning (grey filling in) and in the middle of course (black filling in).



Distance course “Content curator” finished 30 students, their projects at blogs and video reports 10 min-long were placed in net.

Some words about needs in distance course and social services for beginners: analysis of open online course “Social services in distance education” [12], provided by authors on 2011, showed that it has success and popularity yet and is visited constantly. The most activity of visits observed while distance course “Content curator” was going on. It shows that for increasing a learning process efficacy there will be better provided, at first, a distance course about base social services.

### 5. Conclusions

Content curator is a new kind of activity for qualified Internet users. Corresponding to evaluation content curators’ professional level is higher than level of workers up of open educational resources. On founding in experience of foreign pedagogues a distance course “Content curator” been worked up. Results of providing distance learning process for pedagogues of Russia, Ukraine and Byelorussia points on necessary define base training for students. It is necessary to have some skills for work with literature, developed personal learning environment and personal net. For rising of course efficacy it is planned before its beginning to provide distance course for mastery of base social services.

It is also planned to force subjects of information search and methods of definition an authenticity of information that occurs the most difficulties for students.-

Appearance in co-operation with pedagogues of Russia and Ukraine content curators permit to provide the connectivist full value massive open distance courses-where content curators will interchange experience and creative conditions for learning to other pedagogues.

### REFERENCES

1. Chaney P. Contemplating a Content Curation Concept | Social Media Today <http://bit.ly/OphM8J>, <http://www.fastcompany.com/1834177/content-curators-are-new-superheros-web>
2. Kelly D. Is Content Curation in Your Skill Set? It Should Be.: Learning Solutions Magazine <http://bit.ly/V2ImLl>
3. Cohen M. Building Online Influence With Content Curation | Social Media Today <http://socialmediatoday.com/compukol/866976/building-online-influence-content-curation>
4. Chaney P. Content Curation Fundamentals, Part 1 of a Series «Blogger Network <http://blog.utalkmarketing.com/content-strategy/content-curation-fundamentals-part-1-of-a-series/>
5. Farber E. Content Curation : The Ultimate Guide <http://www.contentstrategyhub.com/content-curation-guide>
6. How to Curate Online Content Without Stealing – First Communication Job – Content Curation Marketin... <http://firstcommunicationjob.wordpress.com/2012/11/02/how-to-curate-online-content-without-stealing/>
7. Robin Good. Why Curation Will Transform Education and Learning : 10 Key Reasons <http://www.masternewmedia.org/curation-for-education-and-learning/>
8. Beth Kanter. 7 smart techniques for content curation <http://www.socialbrite.org/2012/08/15/7-smart-techniques-for-content-curation/>
9. Deshpande P. 4 Reasons Why Content Curation Has Gone Mainstream <http://www.forbes.com/sites/ciocentral/2012/06/04/4-reasons-why-content-curation-has-gone-mainstream/>
10. White N. Content Curation Can Help Education System Breed Future Workskills. <http://d20innovation.d20blogs.org/2012/07/27/developing-future-workskills-through-content-curation/>
11. Wilson L. Why content curator is not editor. <http://community.paper.li/2012/03/07/why-a-content-curator-is-not-an-editor/>
12. Kukhareno V. Designing Massive Open Online Courses. Proceedings of the 9th International Conference on ICT in Education, Research and Industrial Applications: Integration, Harmonization and Knowledge Transfer- Kherson, Ukraine, June 19-22, p.273-280 (2013)

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**ВІДКРИТИЙ ОНЛАЙН КУРС «КУРАТОРА ЗМІСТУ»**

Куратор змісту – новий вид діяльності (започаткований у 2008 році) кваліфікованих користувачів мережі з обробки великої кількості інформації для представлення її користувачам соціальної мережі. Для підготовки кураторів змісту розроблений дистанційний курс, в якому розглядаються функції, методи та інструменти куратора. Навчальний процес показав суттєву залежність успішності навчання від наявності розвинутого персонального навчального середовища слухача та вміння обробляти інформацію.

**Ключові слова:** куратор змісту, соціальні сервіси, методи, дистанційний курс.

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**ОТКРЫТЫЙ ОНЛАЙН КУРС «КУРАТОРА СОДЕРЖАНИЯ»**

Куратор содержания – новый вид деятельности (первые упоминания в 2008 году) квалифицированных пользователей сети по обработке большого количества информации для представления ее пользователям социальной сети. Для подготовки кураторов содержания разработан семинедельный дистанционный курс, в котором рассматриваются функции, методы и инструменты куратора. Учебный процесс показал существенную зависимость успеваемости от наличия развитой персональной учебной среды слушателя и умение обрабатывать информацию.

**Ключевые слова:** куратор содержания, социальные сервисы, методы, дистанционный курс.