

Measuring Information and Digital Literacy Activities through Learning Record Store Repository of the NTC for CE of Librarians in Croatia

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Research Aim

- Identify and analyze information and digital activities of librarians through the learning portal
 - analyze learning record data at the learning record store repository of the NTC for CE of Librarians in Croatia
 - test application of an Experience API (xAPI) as an information and digital literacy assessment instrument

Information and Digital Literacy

- viewed from the aspect of instructional design and innovative training and learning architecture standards
- Digital literacy
 - ability to use information and communication technologies to **find, understand, evaluate, create, and communicate** digital information – ability that requires both cognitive and technical skills (ALA, 2013)
 - An integrating concept of a **multitude of literacies** essential for coping successfully with digital society (Martin&Madigan, 2006)
 - Digital competence – **critical thinking, problem-solving abilities, understanding of appropriate using of ICT**
 - a **condition**, not a threshold (Martin&Madigan, 2006)

Information and Digital Literacy

- Information literacy
 - adoption of appropriate information **behavior** to **obtain**, through whatever channel or medium, **information** well fitted to **information needs**, with **critical** awareness of importance of **wise and ethical use of information** in society
 - in accordance with **information-literate surroundings**
(Webber&Johnston, 2004)

Measuring I&D Literacy

- Hard to define information & digitally literate member of society:
 - ever-changing learning, working and social context
 - disruptive technological innovations
 - big digital divide between school, home and the workplace
 - discord between learning experiences in diverse environments
 - hard to correlate I&D literacy habits for personal lives with instructional practice in formal learning settings
- Distinction between **formal** and **informal** (personal) approaches to informational barriers (Huvila, 2012):
 - Formal – *information services* as formal settings within libraries
 - Informal – *digital literacy* – personal intent to overcome the knowledge barriers independently

NTC for CE of Librarians

- National Training Centre for Continuing Education for Librarians in Croatia
 - founded in 2002 by four project partners:
 - National and University Library, Zagreb,
 - Zagreb Public Library,
 - Croatian Library Association, and
 - Library school at University of Zagreb
 - part of the international network of national centres for continuing education for librarians in Eastern Europe and Central Asia
 - providing a lifelong learning program after the initially acquired academic diploma in LIS
 - Non-compulsory & CEU credit one-day courses
 - +350 hours/year
 - traditional learning methods (f2f) + 3 online courses (Moodle)
 - +1500 participants/year
 - +60 courses/year

Former Learning Portal

- presented information about course description and learning objectives, incoming courses, etc.
- built in static HTML pages
- hard to maintain
- did not provide any social or semantic web functionalities

THE TRAINING CENTRE FOR CONTINUING EDUCATION OF LIBRARIANS



hrvatski english

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PROGRAMME

MODULE I: Intellectual Freedom

I.1. Freedom of Access in Libraries

Number of hours:

4 hours/lectures plus 1 hour/exercises

Total number of hours during the year:

2 x 5 = 10 hours

Content description:

Aimed at librarians in all types of libraries. Free access to information as an individual right and collective right. Internal and external barriers to realisation of the right to information and possibilities of their removal. International work on promotion of the right to information (IFLA, UNESCO, Council of Europe). The role of library association in securing provision of their right. Codes of ethics and professionalism.

Lecturers:

Aleksandra Horvat, Ph.D, Krešimir Pintarić, Marina Mihaljević, M.Inf.Sc.

Training strategies:

- lectures
- exercises

Selected bibliography:

1. Slobodan pristup informacijama. // Vjesnik bibliotekara Hrvatske 43, 3(2000).
2. Priručnik o slobodi javne riječi. Zagreb : HND, 1998.
3. Guidelines for Library legislation and Policy in Europe. // Library legislation in Europe. Bad Honnef : Bock+Herchen Verlag, 2000.
4. IFLA Journal 26, 4(2000).
5. Knjižnice i intelektualna sloboda. // HKD novosti 13(1999).
6. Zakon o javnom priopćavanju. // Narodne novine 83(1996).

Location:

National and university library

Date:

4. lipnja i 3. prosinca

Fee:

150 kn

New Learning Portal

- aim to build a new learning portal for CPD on open platform to enable:
 - a greater learning experience,
 - foster social participation and collaboration in learning process,
 - facilitate learning content sharing and reuse,
 - provide personalized portal interface,
 - real-time event management, and
 - open integration and interoperability with learning systems.

http://cssu.nsk.hr

- WordPress open CMS – easy to maintain
- personalized portal interface,
- real-time event management,
- real-time poll's results
- RSS syndication
- e-newsletter



CENTAR ZA STALNO STRUČNO
USAVRŠAVANJE KNJIŽNIČARA

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Pretraži ...

NaslovnicaTečajeviKarijeraO nama

Naslovnica

Nacionalni Centar za stalno stručno usavršavanje provodi bodovani program cjeloživotnog učenja knjižničara i informacijskih stručnjaka.

Raspored tečajevaProgramPolazniciČlanstvo u CentruPlaniranje karijere

Aktualni tečajevi



03. 10. 2014 - Čitateljski klubovi: povijest, osnivanje, organizacija, provođenje
Mjesto: Knjižnica i čitaonica "Fran Galović", Koprivnica



07. 10. 2014 - Međunarodne norme: ISO 2789 za knjižničnu statistiku i ISO 11620 za pokazatelje uspješnosti
Mjesto: Nacionalna i sveučilišna knjižnica u Zagrebu

Kalendar

Lis 2014

M	T	W	T	F	S	S
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

Raspored svih tečajeva | Raspored u pripremi

Kontakt

Centar za stalno stručno usavršavanje knjižničara Hrvatske bratske zajednice 4 HR-10000 Zagreb

cssu@nsk.hr +385 01 6164 037

+385 01 6164 186

Za polaznike

Za predavače

Za suradnike

CSSU e-izdavanja

Slobodan pristup publikacijama Centra za stalno stručno usavršavanje i relevantnim radovima.

CSSU repozitorij

Otvoren pristup edukacijskim materijalima

Novosti

Događanja

21.07.14.

Jesenski raspored tečajeva u pripremi

01.07.14.

Mrežni portal Centra za stalno stručno usavršavanje knjižničara

17.03.14.

Postanite član Centra za stalno stručno usavršavanje knjižničara

POGLEDAJ SVE

Linkovi

SRCE

Besplatni webinar

Tjedan Centra za e-učenje

Okrugli stol povodom Međunarodnog dana pismenosti

Nova radionica Srca - Exceliranje

Elektroničke novosti

Upiši email

Pošalji

Anketa

Prema Vašem mišljenju, koje su najvažnije teme stručnog usavršavanja (do max 5 odgovora):

☐ Pravna i etička pitanja

☐ Upravljanje i razvoj korisničkih službi i usluga

☐ Izgradnja i upravljanje zbirnama

☐ Bibliografska obrada, predmetno označivanje

☐ Vrednovanje usluga i primjena istraživanja

☐ Elektronički izvori i sustavi

☐ Nakladništvo

☐ Digitalizacija

☐ E-učenje

☐ Nešto drugo

Glasaj

Pogledaj rezultate

http://cssu.nsk.hr

- iCal and Google Calendar functionalities
- online reservation
- open education repository

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Pretraži ... 

[Naslovnica](#) | [Tečajevi](#) | [Karijera](#) | [O nama](#)

Centar za stalno stručno usavršavanje knjižničara u RH > [Tečajevi](#) > Modul V: Vrednovanje usluga i izvora i primjena istraživanja u knjižnicama > [Međunarodne norme: ISO 2789 za knjižničnu statistiku i ISO 11620 za pokazatelje uspješnosti](#)

Međunarodne norme: ISO 2789 za knjižničnu statistiku i ISO 11620 za pokazatelje uspješnosti

V.4. Međunarodne norme: ISO 2789 za knjižničnu statistiku i ISO 11620 za pokazatelje uspješnosti: međunarodni okviri za prikupljanje, mjerenje i odlučivanje u knjižnicama

Prikupljanje podataka i izvještavanje. Definicija i osnove knjižnične statistike. Međunarodna norma za knjižničnu statistiku, ISO 2789 (2006). Prikupljanje podataka knjižnične statistike za elektroničke usluge (zbirke, usluge i službe). Knjižnična statistika u hrvatskim knjižnicama. Izrada upitnika. Primjeri prikupljanja knjižnične statistike u europskim knjižnicama. Statistički podaci kao pomoć u upravljanju, odlučivanju i zagovaranju. ISO 11620 (2008) norma za pokazatelje uspješnosti i vrednovanje kvalitete u knjižnicama, mogući pokazatelji uspješnosti. Sustav LibQUAL. Definiranje referentnih okvira za vrednovanje.



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Detalji tečaja

 5 sati

 0.5 CEU

 Nacionalna i sveučilišna knjižnica u Zagrebu
15 slobodnih mjesta

 07. 10. 2014 - 10:00-15:00

 250 kn (200 kn + PDV)

Rezervacija

 [Potvrda dolaska](#)

 [Google Calendar](#) - [iCal](#)

Predavačica:
Dr. sc. Marina Mihalčić, knjižničarska savjetnica

Kompetencijska matrica: [F.1.2.](#)

ECIL2014, 20.10.2014.

http://cssu.nsk.hr

- social participation and collaboration,
- content sharing and reuse
- easy commenting and rating of courses

Za predavače

Za suradnike

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Ishodi učenja: Polaznici će nakon predavanja i radionice moći vrednovati poslove u knjižnicama, obuhvaćene statističkim istraživanjem tradicionalnih poslova i procesa, ali i elektroničkih izvora i usluga. Polaznici će usvojiti referentni okvir za vrednovanje ili usporedbu s drugim sličnim knjižnicama ili uslugama.

Odabrana literatura:

1. Egghe, L. Rousseau, R. Elementary Statistics for Effective Library and Information Services management. London : ASLIB_IMI, 2001.
2. IFLA Statistics and Evaluation Section. Useful Links. <http://archive.ifla.org/VII/s22/statlinks.htm>.
3. Hornby, S. Elementary Statistics for Effective Library and Service management. // Journal of Documentation, Vol. 58, 2(2002), 247-249. (Emerald).
4. Mejovšek, M. Metode znanstvenog istraživanja u društvenim i humanističkim znanostima. Jastrebarsko: Naklada Slap, 2008. 371 str.
5. Kornelija Petr-Balog. Prema kulturi vrednovanja u visokoškolskim knjižnicama - Osijek : Filozofski fakultet, 2010. - 263 str
6. ISO 2789 (2006) Information and documentation - International library statistics
7. ISO 11620 (2008) Information and documentation - Library Performance Indicators

Komunikiraj sa:

 Postaj na Facebook  Tweetaj ovaj post ★ ★ ★ ★ ★ (Ovaj članak još nije ocijenjen)



Komentiraj koristeći...

 Facebook društveni dodatak

 250 kn (200 kn + PDV)

Rezervacija

 [Potvrda dolaska](#)

[GoogleCalendar](#) - [iCal](#)

Predavačica:

Dr. sc. Marina Mihalić, knjižničarska savjetnica

Kompetencijska matrica: [E.1.2.](#), [E.4.2.](#), [F.4.](#), [G.2.](#), [G.3.](#)

Metode poučavanja: predavanje i radionica

Mjerenje postignuća: Polaznici će samostalno primijeniti statističku metodu i izraziti uspješnost poslovanja knjižnice.

Program Centra za stalno stručno usavršavanje knjižničara izvodi se iz sredstava programa Kulturnog razvitka Ministarstva kulture Republike Hrvatske



Impresum **Sadržaj portala**

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CSSU 2014. Ul. Hrvatske bratske zajednice 4 p.p. 550, 10000 Zagreb. HRVATSKA | Tel. ++ 385 1 616-4037

Experience API (xAPI)

- To overcome the assessment limitations specific to the informal and non-formal learning environment, an Experience API standard was tested as a digitally-incentive assessment to measure information and digital engagements of the portal users
- xAPI
 - ADL standard that operates based on tracking activity streams, officially released on April 2013
 - evolved version of SCORM standard for web-based e-learning and not limited to a particular eLearning course or LMS
 - uses software to track and record things people do in the form of triplets (Actor-Verb-Object)
 - Idea of tracking activity streams emerged from social networking (Facebook Open Graph, Twitter, Mozilla OpenBadges ...)
 - enables learning content and learning systems to communicate in a manner that records and tracks all types of learning experiences

Research methodology

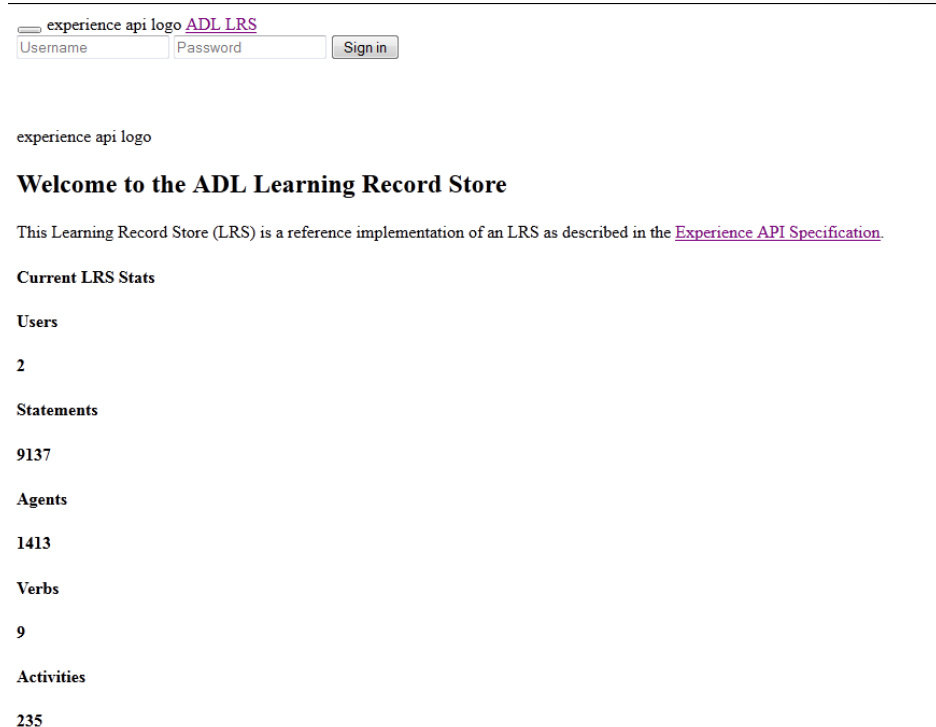
- **Experience API** standard and Learning Record Store (LRS) were tested to analyze the scope of user information and digital competences
- **LRS** is a type of data store that acts a repository for learning records and is necessary for using xAPI.
- xAPI assumes that all statements stored in LRS are defined in triplets:

learner-verb-object

- In our example, we could expect the following learning statements:
 - *user1 posts a comment*
 - *user2 makes an online registration to the course 101*
 - *user3 rates the course*
 - *user4 edits his user profile ...*

Research methodology

- Learning record store has been implemented <http://lrs.nsk.hr:8000>
 - To overcome the use of a commercial WordPress xAPI plugin, decision was to use **user activity log file** recorded through learning portal during a **three-month period** and to **transfer it into LRS** into the form of **learning experience statements**



The screenshot shows the login page of the ADL Learning Record Store. At the top, there is a navigation bar with the 'experience api logo' and a link to 'ADL LRS'. Below this is a login form with fields for 'Username' and 'Password', and a 'Sign in' button. The main content area has a heading 'Welcome to the ADL Learning Record Store' and a paragraph explaining that the LRS is a reference implementation of an LRS as described in the 'Experience API Specification'. Below this, there is a section titled 'Current LRS Stats' which lists the following statistics:

Category	Count
Users	2
Statements	9137
Agents	1413
Verbs	9
Activities	235

Research methodology

- While parsing log files, user activities were grouped in **Helsper&Eynon four types of skills** (critical, creative, social and technical), which authors discerned as the most common types of skills correlated with digital inclusion and engagement with ICTs
- To form learning experience statements from user log file an ADL xAPI Vocaburay was used (<http://adlnet.gov/exapi/verbs/>)

Critical	Creative	Social	Technical
Answered Scored Mastered	Imported	Registered Attended	Attempted Launched

Findings

- While excluding web crawlers data from raw log files, to LRS was transferred in total 8902 semantic learning statements, created by 1412 unique users (users with unique IP addresses)
- A statistical analysis is carried out in R-Studio statistical environment
 - calculating mean,
 - standard deviation, and
 - correlation between four type of skills (critical, creative, social and technical)
- Statistical mean of observed data is 6.27, meaning that every user counted an average of 6.27 digital activities throughout the open learning portal

Findings

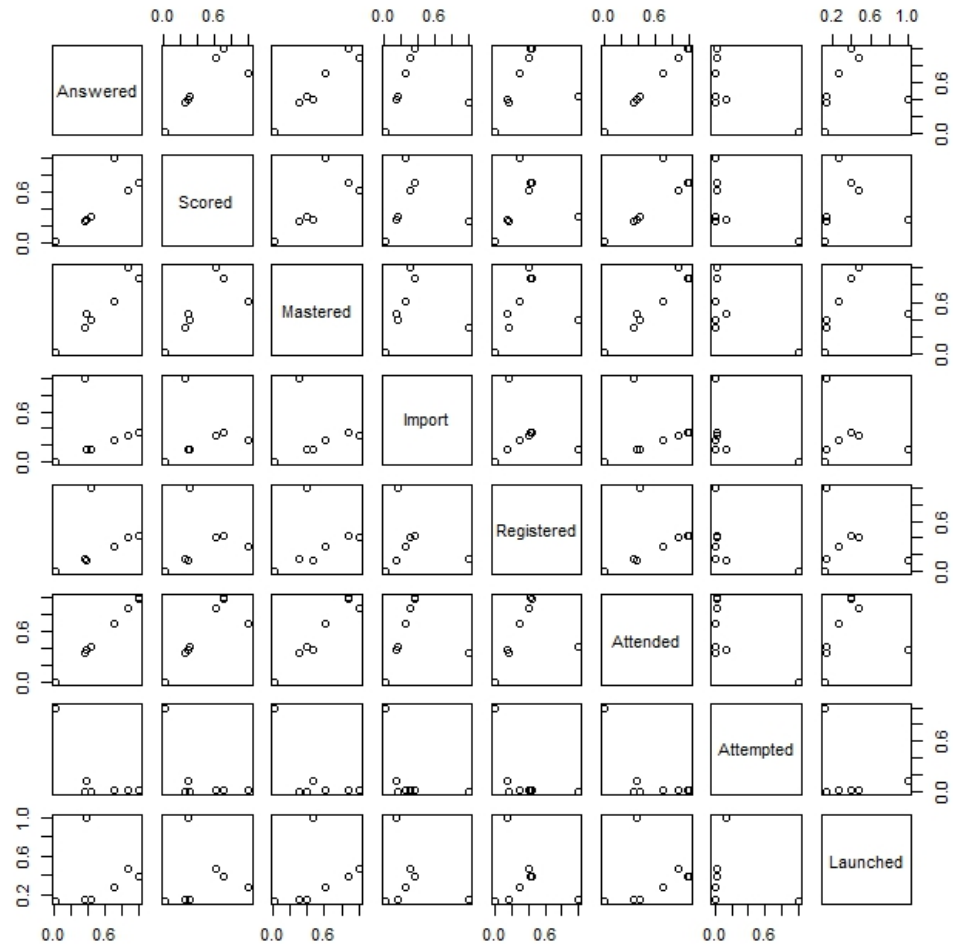
- Findings revealed that most user activities fall highly in the critical skills category (N=6398, 72%), followed by technical (N=1241, 14%), creative skills (N=793, 9%) with social skills (N=470, 5%) at the bottom.
- Users engaged most in mastering content, attempted actions, importing data, answering, registering, attending, launching and scoring.

Type of skills	Critical			Creative	Social		Technical		Total
Verbs	Answered	Scored	Mastered	Import	Registered	Attended	Attempted	Launched	
No.	349	2	6047	793	315	155	1108	133	8902
%	3.92	0.02	67.92	8.90	3.53	1.74	12.44	1.49	100
Mean	0.24	0.001	4.28	0.56	0.22	0.10	0.78	0.09	6.27
Total	6398			793	470		1241		8902

Table 1. Number of statements distributed on four types of skills by particular verbs.

Findings

- Statistical correlation analysis is used to identify and to measure the dependency among given set of data, ie. given type of skills.
 - **Social skills** are **highly correlated** with all types of **critical skills**
 - **Technical skills**, the same as **creative skills**, have **the lowest dependency** with other types of skills



Conclusion

- Librarians engage regularly in an open learning portal
- Information and digital literacy consisted of both cognitive and technical proficiencies
- As critical and technical skill sets scored the highest means, librarians' engagement could be characterized as part of more knowledge consumption than knowledge creation domain.
- Technology skills are been used independently of other type of skills
- Full implementation of xAPI standard would provide detail users' category analysis
- xAPI would be suitable for:
 - information and digital literacy tool that will measure and express critical, creative, social and technical proficiencies equally,
 - for creation of personal learning record and self-evaluation

Application

- xAPI personal learning record integrated in the users' profile page indicating level of engaged critical, creative, social and technical skills

CSSU

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NaslovnicaTečajeviKarijeraO nama

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REPUBLICI HRVATSKOJ

PROGRAM 2014

Kontakt

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cssu-admin

@cssu-admin

Aktivno Upravo sada

Critical

Creative

Social

Technical

52

1

2

2

Aktivnost

Profil

Notifications 218

Poruke 0

Friends 0

Groups 1

Forums

Događaji

Postavke

Osobno

Spominjanja

Favoriti

Prijatelji

Grupe

Prikaz: Sve

Što ima novoga, cssu-admin?

cssu-admin added the event Kvalitativne metode u istraživanju knjižnica i korisnika prije 2 hours, 23 minutes

Komentar 0

Favorit

Izбриši

cssu-admin je napisao novi post, Prilog u Novostima HKD prije 2 hours, 59 minutes

U Novostima Hrvatskog knjižničarskog društva (64, 2014) objavljen je prilog o Centru za stalno stručno usavršavanje knjižničara u RH. Prilog je dostupan u cijelosti na adresi <http://hkdrustvo.hr/hkdnovosti/clanak/1004>.

Komentar 0

Favorit

Izбриši

ECIL2014, 20.10.2014.

Thank you for your attention!

dmachala@nsk.hr