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# ABC METHOD FOR ONLINE COURSE DESIGN- FROM F2F TO ONLINE WORKSHOP IN CROATIAN PERSPECTIVE

*Sandra Kučina Softić, Tona Radobolja, University of Zagreb University Computing Centre SRCE, Croatia*

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## Abstract

Implementation of digital technologies into the educational process is not new but has significantly increased with the pandemic of COVID-19 because of the lockdown and sudden move to the online environment. The majority of teachers do not have the knowledge and skills to know how to properly implement digital technologies into teaching and learning, and neither they have time to search for digital technologies or to learn how to use them. Therefore, organized support and training in the use of digital technologies are very important, enabling teachers to focus on the course subject and with help of trained support staff find the proper way how to implement them into their teaching. A number of training courses and workshops related to digital education are available to teachers, and one of them that has proven to be of high value is the ABC LD Workshop designed by University College London colleagues. Based on Diane Laurillards' Conversational Framework, this engaging, hands-on curriculum development workshop enables teachers to get a new perception and understanding of what an e-course could look like. Based on participation in the Erasmus+ project the ABCtoVLE and gained experience, the E-learning Centre at SRCE team adapted this workshop for the Croatian educational environment and later designed it to be held online aiming to provide teachers with hands-on, just what they need training so they can easier get around the online environment and provide a high-quality learning experience to students.

**Keywords:** course design, ABC learning design method, online courses, digital technologies, support to teachers

## ABC to VLE project

Erasmus+ ABCtoVLE project (<https://abc-ld.org/abctovle/>) started in autumn 2018 and lasted for two years. The project was initiated by University College London (UCL) and brought together 12 European universities to further develop, localise and evaluate the ABC LD learning design method. The partners on the project were University College Absalon, University of Amsterdam, Dublin City University, University of Helsinki, KU Leuven, University of Milan, Sorbonne University, Tallinn University, Polytechnic University of Timișoara, VIVES University of Applied Sciences, University of Zagreb University Computing Centre SRCE and University of Oxford (associate partner). The project was coordinated by University College London. The project aimed to develop support structures to help teaching teams to implement their ABC learning designs within the local Virtual Learning Environment (VLE) or Learning Management System (LMS). The project focused on institutional adoptions of ABC Learning Design (LD), user experiences and how the designs could link to the local technical environment, particularly their Virtual Learning Environment (VLE) such as Moodle, Canvas or Blackboard.

The goal of the project was to adapt the ABC method, which will help teachers to improve their courses/modules by applying new technologies and setting them up as partially (mixed) or completely online courses while considering a whole range of aspects from pedagogical, technological, quality and support issues to cross-cultural and strategic ones. The approach generates high levels of engagement, creative informed dialogue and group reflection about curriculum design among even time-poor academics. Extensive testing at UCL and other institutions has shown high levels of academic enthusiasm and satisfaction with the method, although it is recognised that educational effectiveness can only be determined through evaluation. Today the ABC LD method is worldwide known and implemented in higher education institutions' course design.

## ABC method and ABC workshop

ABC Learning Design (<https://abc-ld.org/>) is a high-energy, hands-on curriculum development workshop developed at the University College London. In just 90 minutes teaching teams work together to create a visual 'storyboard'. The storyboard is made up of pre-printed cards representing the type and sequence of learning activities (both online and offline) required to meet the module or programme learning outcomes. ABC workshop is prepared for

the face-to-face environment and has proven to be highly transferable and works well to engage teachers in a large range of disciplines, and educational contexts in multiple countries. One of the outputs of the project was to further test, refine and expand this rapid-design format in partners' institutions, taking into account cultural issues, localisation and language, alignment with local institutional strategies, alignment with quality and other policies, diverse delivery and evaluation approaches, transfer to the local VLE and localised support capacity. ABC has been particularly useful for new programmes or those changing to an online or blended format. The ABC workshop was recognized as a useful way to provide teacher training on new teaching methods. The approach generates high levels of engagement and stimulates creative informed dialogue and group reflection about curriculum design among even time-poor academics. ABC was developed by Clive Young and Nataša Perović from University College London in 2014. It builds on the six learning types concept from Prof Diana Laurillard's hugely respected model of how students learn, 'Conversational Framework', described in *Teaching as a Design Science* (2012).

### **Role of SRCE in the e-learning implementation in higher education**

University of Zagreb University Computing Centre - SRCE ([www.srce.hr](http://www.srce.hr)) is the oldest infrastructural institution of the academic and research community in the area of application of information and communication technologies (ICT) in Croatia. Established in 1971, SRCE is today the key institution in planning, designing, constructing, and maintenance of the computing, data and information infrastructure, the e-infrastructure for the Croatian academic and research community. SRCE is also the competence centre for information and communication technologies as well as the centre for education and support in the area of ICT application. The E-learning Centre at SRCE ([www.srce.hr/ceu](http://www.srce.hr/ceu)) is the national centre for e-learning implementation support in higher education in Croatia. Established in 2007, the E-learning Centre started its work first as the central unit at the University of Zagreb for support in the systematic implementation of e-learning. Through the years the E-learning Centre expanded its work to other higher education institutions confirming its role as the national centre. The main focus of the E-learning Centre at SRCE (ELC) is to provide accessible and sustainable support to higher education institutions, teachers and students in the use and application of new technologies into teaching and learning, ensuring and providing a generally accessible e-learning platform and joint/centralized resources required for application of e-learning and finally, but not less important, promotion and dissemination of information about e-learning. One of the first activities of the Centre was the establishment and maintenance of a university platform for e-learning. The platform is based on the Moodle open source software and is continuously upgraded according to user needs. Today, it is a virtual learning environment called Merlin, which consists of an e-learning platform, a videoconferencing system and an e-portfolio system plus it is connected to the Information System of Higher Education Institutions in Croatia (ISVU). More than 30.000 e-courses held by 10.000 teachers for almost 100.000 students per academic year are on the e-learning platform Merlin. The ELC supports users in the process of the implementation of e-learning technologies in the educational process. The team provides help for teachers in the preparation and maintenance of e-courses (blended mode or fully online), organizes training for teaching staff in e-learning technologies and course design and supports students in the virtual environment. The Centre today has 12 full-time employees who ensure continuous, innovative and efficient work of the Centre. Participation in the Erasmus+ project ABCtoVLE was a great opportunity for the ELC team to gain new insights into teachers' support in course design and to ensure the best possible support to Croatian teachers using digital technologies in the educational process.

### **Localisation of ABC Workshop for the Croatian Education Environment**

One of the first tasks in the ABCtoVLE project, for each project partner, was the localisation of the ABC Learning Design Workshop to the native language and adaptation to the country's education environment. ABC workshop is based on the storyboard with cards representing the type and sequence of learning activities (both online and offline) required to meet the module or programme learning outcomes. One of the first activities for the ELC team, in order to translate the workshop into the Croatian language and to adapt it to the Croatian education environment, was to pass training and familiarise with a workshop as such. The training trainers were held by authors Clive Young and Nataša Perović at SRCE in December 2018. The next step was to translate all materials and documentation related to the workshop. The ELC team adapted the workshop to the Croatian environment, educational policies and practices. In preparation for the workshop, attention was paid to different groups of teachers (school teachers, higher education teachers and adult learner teachers) who could attend the workshop. The ELC team translated all workshop materials to Croatian but to ensure that the original message was kept, the cards consisted of Croatian text and in smaller print English version. All translated materials related to the ABC workshop are available on the project web pages prepared in the Croatian language. ABC workshop was included in the portfolio of the E-learning Centre training activities for teachers (courses and workshops) in February 2019.

In order to provide additional information to teachers and all interested in the ABCtoVLE project, ELC has prepared a webpage in Croatian with all translated materials related to the ABC workshop and there regularly published the information related to the project (<https://www.srce.unizg.hr/centar-za-e-ucenje/medunarodna-suradnja/abc-vle>).

**ABC metoda dizajna nastave**

**Tipovi učenja (prednja strana)**

**Stjecanje znanja**

Učenje stjecanjem znanja odnosi se na

- slušanje (predavanja ili audio-zapisa (eng. podcast))
- čitanje (knjiga ili digitalnih resursa)
- gledanje (demonstracija ili videozapisa).

**Acquisition**  
Learning through acquisition is what learners are doing when they are listening to a lecture or podcast, reading from books or websites, and watching demos or videos

**Suradnja**

Učenje kroz suradnju obuhvaća raspravu, praktičan rad i rješavanje/obavljanje postavljenog zadatka. Temelji se na istraživanju i aktivnom sudjelovanju u procesu stvaranja i stjecanja znanja.

**Collaboration**  
Learning through collaboration embraces mainly discussion, practice, and production. Building on investigations and acquisition it is about taking part in the process of knowledge building itself

**Rasprava**

Kod ovog načina učenja od studenta se očekuje da iznosi ideje i postavlja pitanja te da aktivno sudjeluje u raspravama koje su započeli nastavnici ili drugi studenti.

**Discussion**  
Learning through discussion requires the learner to articulate their ideas and questions, and to challenge and respond to the ideas and questions from the teacher and/or from their peers

**Istraživanje**

Ovaj način učenja potiče studenta na istraživanje, usporedbu i kritički osvrt na tekstove i druge resurse koji sadrže pojmove i ideje s nastave.

**Investigation**  
Learning through investigation guides the learner to explore, compare and critique the texts, documents and resources that reflect the concepts and ideas being taught

**Praktičan rad**

Praktičan rad omogućava studentu primjenu stečenog znanja pri izradi samostalnih zadataka (zadaci, pokusi, seminarski radovi...). Dobivena povratna informacija student može iskoristiti za unapređenje predanog rada. Povratna informacija može biti osobni osvrt, komentar drugih studenata ili nastavnika te povratna informacija same aktivnosti (npr. rezultat testa za samoprocjenu).

**Practice**  
Learning through practice enables the learner to adapt their actions to the task goal, and use the feedback to improve their real action. Feedback may come from self-reflection, from peers, from the teacher, or from the activity itself. If it shows them how to improve the result of their action in relation to the goal

**Implementacija stečenog znanja**

Nastavnik definira aktivnosti u kojima studenti trebaju osmisliti i izraditi zadatke primjenom stečenih znanja. Ove se aktivnosti ocjenjuju i jednom kad su predane nije ih moguće mijenjati.

**Production**  
Learning through production is the way the teacher motivates the learner to consolidate what they have learned by articulating their current conceptual understanding and how they used it in practice

Tipovi učenja s jedne strane i primjeri aktivnosti s druge strane

Figure 1. ABC cards with learning types in Croatian

### **Issues arising from local adoption of ABC workshop**

In the translation of the workshop materials, special attention was given to learning types. In order to preserve full clarity, the English version was left on the card along (in a smaller print) with the Croatian version. Also, translated cards were distributed to several teachers to get feedback on an understanding of each learning type definition in Croatian. Along with that, during the first few workshops held by the ELC, participants were asked to give comments on the description of learning types in cards. As a result, some smaller adjustments to learning types definitions were made. For the majority of the materials, several adjustments were made that were necessary to adapt to the Croatian education environment and policies. One of the materials that had some significant changes was the Course Information Sheet (Fig 2.). As teachers in Croatia rarely use Twitter, it was changed to the course's short description (in Croatian- sažetak kolegija). Moreover, ECTS points or the number of course hours were added so that teachers have a better overview of the organization of the course and planned student workload as teachers sometimes lose the idea of student workload on the course and make it more demanding than it should be based on the set ECTS points. One more addition to the Course Information Sheet was list of learning outcomes (in Croatian- ishodi učenja) with the aim to help teachers make better Learning Outcomes definition and, secondly, to easier align them with learning activities and assignments, especially those designed in online learning environments (Gil-Jaurena, Kucina Softic, 2016).

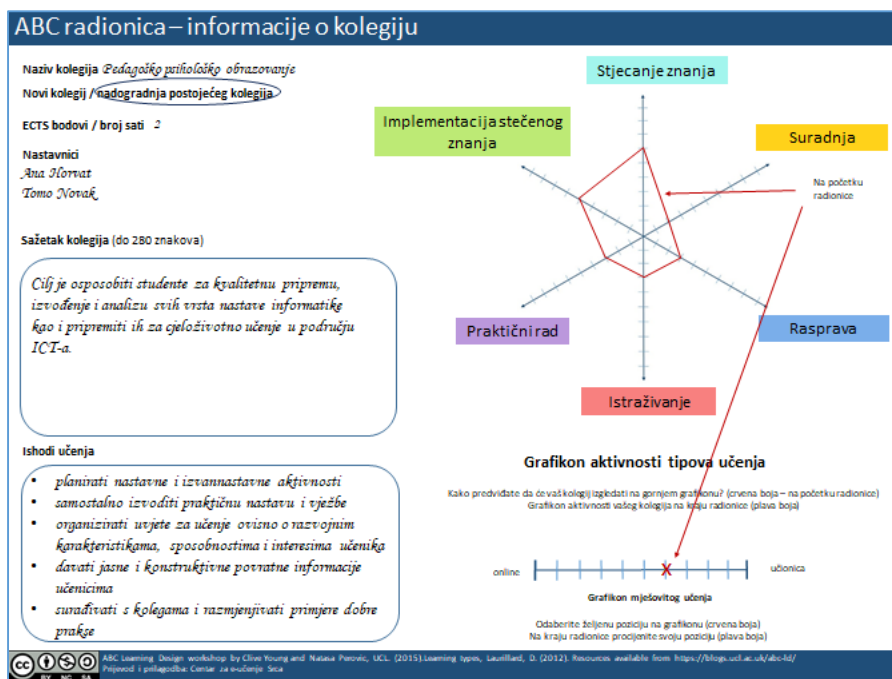


Figure 2. Course Information Sheet adopted for Croatian version of ABC workshop

In the end, the duration of the workshop was extended to 120 hours instead of 90 minutes as originally planned for the workshop. Based on participants' feedback it was the appropriate time (only a few teachers considered the workshop to be too short). Some slight changes were made in a presentation held at the beginning of the workshop in order to adapt it to our environment. The ELC has been working with teachers, providing consultations and support in the development of e-courses, so the workshop leaders made these adjustments to tailor the workshop in order to better meet the needs of the teachers.

### ABC workshop

The first ABC LD workshops in the Croatian language started in February 2019. These were face-to-face workshops at the SRCE premises for 25-30 people. Each workshop was held by two workshop leaders for such a number of participants. Participants are divided into 5-6 groups, each group working on the design of a course, either an existing one or an imaginary one. Workshops were organised in two ways:

- Workshop with an open invitation: teachers from different institutions and with different subject backgrounds can enrol (quite heterogeneous groups)
- Workshop upon invitation by the institution: teachers are from the same institution but from different subject areas (more homogenous groups)

Students participated in some workshops as well, and they preferred to be working as a student group, not mixing with teachers. Participants at workshops were dominantly working on existing courses, but the groups were too heterogeneous, workshop leaders provided examples of courses that would be of interest to all participants like academic integrity, research methods or some other general topic. ABC workshop was really well received, and during 2019 and at the beginning of 2020 eight workshops were held with 167 participants. The average grade of the lecturer's presentation quality and engagement for these workshops was 4,83 out of 5 and the average grade for workshops, in general, was 4,63 out of 5. Information about the ABC workshop was soon disseminated outside the Croatian border, so the workshop was held very successfully in Slovenia and Bosnia and Herzegovina as well. Then in March 2020, all planned workshops were cancelled due to the pandemic and lockdown.

### Moving online with workshop due to the pandemic

When the pandemic hit, the first task of the ELC team was to ensure high-quality and easily accessible support to users – higher education institutions, teachers and students. It was of utmost importance to ensure the continuation of the learning process and the end of the academic year 2019/2020. In July 2020, the ELC team started to think about how to design the ABC Workshop for the online environment. Several attempts were already in progress by ABCtoVLE project partners and the idea of the Dublin City University (using Microsoft Excel as Storyboard) was

chosen as suitable, and then further designed and developed. For the learning environment in the online ABC Workshop, the ELC team chose the videoconferencing system Adobe Connect as it was available at the SRCE, Microsoft Excel for Storyboard, learning cards and the Course Information Sheet. All course materials were put in the ABC e-course in Moodle and was available to participants before the workshop, so they can familiarize themselves with the topic and could have clearer expectations of the workshop. The number of participants in an online environment was reduced to 12-15 with two workshop leaders. Adobe Connect has breakout rooms so participants were divided into two groups, one led by each workshop leader after the first part of the workshop with an introduction presentation (Fig 3). The duration of the workshop was extended to 3 hours with one break for 15 minutes. This is an interactive online workshop as teachers are working on the design of the course, like in the f2f workshop, but now online. Workshop leaders work with participants in each breakout room, ensuring that all participants are engaged, supporting them in their discussion and ensuring that they are not passive and silent participants, but active and engaged in collaboration with others to design a course. This is highly demanding for the workshop leaders as they have to be fully engaged and concentrated for 3 hours. It is not easy to engage participants online for such a long period of time. Participants' feedback on the duration of the workshop is that is of appropriate length with about 5% of replies that it is too short.

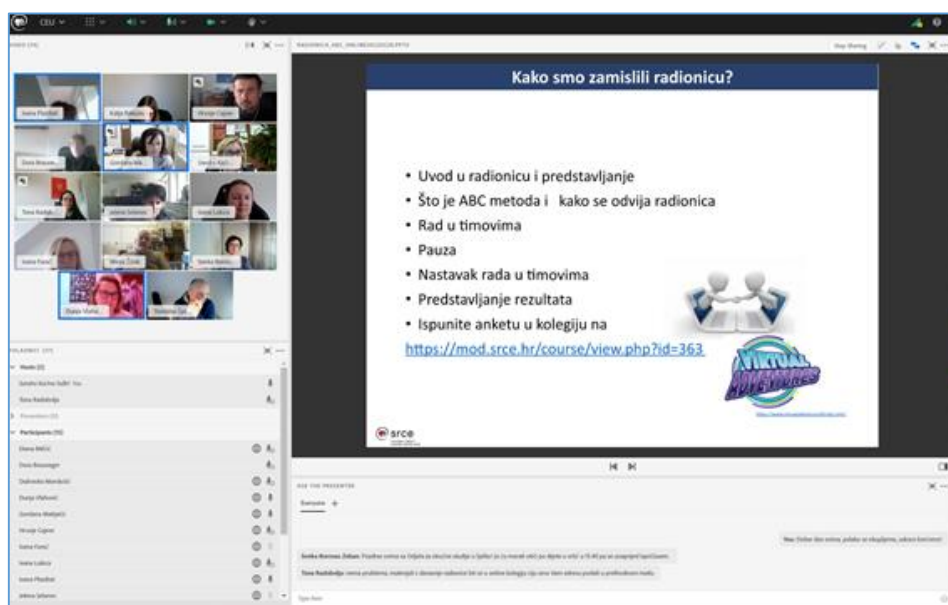


Figure 3. online ABC workshop

ABC\_online\_workshop\_20220228.xlsx - Excel

razlikovati vrste akademskih radova (završni, doktorski, seminarski, recenzije)

4. Storyboard (predložak za dizajn e-kolegija)

4a. Upišite redni broj prednja, naziv aktivnosti i predviđene sate za pojedini zadatak

4b. Odaberite aktivnosti – možete odabrati više različitih tipova učenja (različite boje) ili više različitih aktivnosti istog tipa učenja (više aktivnosti iste boje).

4c. Upišite vrijeme koje je potrebno studentu za izvršavanje pojedine aktivnosti

4d. Označite hoće li vrednovanje biti formativno ili sumativno, a moguća je i kombinacija

4e. Označite koji će ishodi učenja biti povezani s pojedinom aktivnosti. Ako je definirano više ishoda učenja za pojedinu aktivnost, upisuju se u zasebnim redovima.

4a. Tjedan i naziv aktivnosti

4c. Odaberite tip učenja (definirani su na prvom radnom listu) ili upišite potpuno novi

Ukupno sati	60.0	27	4	4	11	9	5	7
1	1	1	1	1	1	1	1	1
2	5	4	1	1	1	1	1	1
3	5	3	1	1	1	1	1	1
4	0	1	1	1	1	1	1	1
5	2	1	1	1	1	1	1	1
6	3	1	1	1	1	1	1	1
7	12	1	1	1	1	1	1	1
8	3	1	1	1	1	1	1	1

1. Definicije 2. 8. Akcijski plan 3. 1 & 7. Informacije o e-kolegiju 4. 2 & 6. Aktivnosti tipova učenja 5. 3 & 5. Grafikon 6. 4-op1. Storyboard

Figure 4. Storyboard in the Excel in online ABC workshop

As the storyboard is developed in MS Excel, it was decided that workshop leaders fill in the excel sheets with information dictated by participants (Fig 4). After the workshop, the excel sheet is added to the ABC e-course in Moodle and all participants can access it and use it further for their purposes. In order to avoid technical problems in the use of videoconferencing systems, participants got instructions in advance on how to make tests to ensure that there are no technical issues so technical problems were minimised. At the beginning and at the end of the workshop participants were asked to turn on their cameras so that they can familiarise with each other. Project leaders have cameras on all the time. Also at the beginning of the workshop, all participants introduce themselves in a way that they say their name, institution, a subject they teach and the reason why they chose to attend the workshop. This is something that was introduced to the online workshop in order that participants better acquaint with each other and with workshop leaders and to provide a collaborative atmosphere. During the workshop participants can leave on or turn off their cameras, as often they do not have high-quality equipment or a good Internet connection. The preferred way of communication in the workshop is oral communication, but sometimes participants had issues with a microphone so they used the chat, or some participants preferred chat as a way of communication and could better express themselves in that way. The first online ABC workshops started in September 2020. It was tremendous stress for workshop leaders to hold the first few online workshops, as teachers already have been stressed by moving to the online environment and being online all the time. The biggest issue was would online workshops ensure their collaboration and engagement as in a physical environment. But positive feedback and growing interest in the workshop, outgrow the stress and fear, and with some fine-tuning, it was a great success. Another positive outcome was that with the online workshop teachers and educators from all over Croatia could attend it. Along with that, higher education institutions asked for the ABC workshop as a part of training in digital skills for their teachers. After each workshop teachers were invited to fill in the survey which is in the ABC e-course, it is on a voluntary base and this feedback is important for workshop leaders for further improvement of the workshop. A certificate of attendance and digital badge is also available in the ABC e-course. The average grade of the lecturer's presentation quality and engagement for these workshops was 4,91 out of 5 and the average grade for workshops, in general, was 4,83 out of 5. Up till April 2022, 22 online ABC workshops were held for 290 participants.

Some of the comments from participants in the survey:

*Only praise, I will implement the acquired knowledge in existing courses. Thank you!*

*Excellent workshop, very useful and interesting, well prepared and done!*

*Thanks for the new perspective on course planning.*

*This should be mandatory education for teachers at UNIZG*

*Practical and focused. And I hope to have the opportunity to repeat the workshop together with some of my colleagues in the group so that we can work together on the redesign of the existing courses.*

*It was interesting for me to see how the exercises from the lectures can be done just as successfully online.*

There are some comments referring to the technical issues as sometimes participants' camera or microphone did not work as they did not do the testing before the workshop so they had difficulties in getting around Adobe Connect or they had issues with an Internet connection.

### **ABC workshop face-to-face or online- conclusion**

There is no question that the ABC workshop developed by Young and Perović is well designed and just what teacher needs when implementing digital technologies into the education process. ABC workshop is originally designed for a face-to-face environment engaging participants in designing courses with a different perspective than they are accustomed to. Working in groups participants discuss among themselves how to design courses using cards for learning types and that is a big plus as usually, teachers are working on their own on the development of courses. Workshop leaders are facilitators enhancing participants' discussion and answering the participants' questions. Communication is easier as this is a physical environment, and it is left to participants to decide how much they will engage during the workshop. The online ABC workshop has been designed a little bit differently. Based on experience in working with teachers, the ELC team decided to work jointly with teachers on course design full-time. It may seem unnecessary but teachers do not have much time and when they decide to



find 3 hours for a workshop, they want a full package covering all topics and workshop leaders ready to answer all their questions and doubts and help them with their courses. Yes, it is more demanding and requires full-time attention, but feedback from teachers is very positive and surveys are showing even better results than for the ABC face-to-face workshop. In October 2021, as the situation with COVID-19 was better, one face-to-face workshop was held again. Having experience with both forms of the workshop, it can be concluded that the ABC workshop is certainly well received and just the right workshop for teachers and educators wishing to set new learning designs for their courses. Nevertheless the form of delivery, the ABC workshop can help teachers and it should be part of compulsory training activities for all those engaged in the design of the teaching and learning process. At this moment, workshop leaders find the online version more appropriate and accessible for Croatian teachers although more demanding for performing.

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