



Do It Yourself in Education (DIYLab): Spanish Higher Education

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DIYLab — Do It Yourself in Education: Expanding Digital Competence To Foster Student Agency And Collaborative Learning



Lifelong

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Partnerts





University of Barcelona Grup de recerca Esbrina Barcelona, Spain



University of Oulu Oulu, Finland



Charles University Prague, Czech Republic



Escola Virolai Barcelona, Spain



Oulu University Teacher Training School Oulu, Finland



ZŠ Korunovační Faculty School Prague, Czech Republic

Digital competence

Connectivism

(Siemens, 2008; Kop & Hill, 2008)

Youth culture

(Buckingham, 2007)

Create, share and learn in collaboration

(Guzzetti, Elliott, & Welsch, 2010)

PRODUCERS

Starting in the '90s (McKay, 1998) (Spencer, 2005) (Eisenberg & Buechley, 2008) (Guzzetti, Elliott & Welsch, 2010) (Lankshear & Knobel, 2010) (Kafai & Peppler, 2011)











The project aims

Expanding students'



To deeply and sustainably transform teaching and learning practice in institutions involved.

To promote life-long, lifedeep and <u>life</u>-wide learning by...

Project overview



The DiyLab project in higher education



STUDENTS will develop agency, collaboration and digital skills using digital technologies Sharing



2. Methodological approach

Collaborative action research

(Reason and Bradbury, 2001, p. 1)

• Complementary research methods (Green, Camill & Elmore, 2006)



First step Analyzing teaching plans



Categories to analyze

- Pedagogy undergraduate degree.
- Primary School Teacher undergraduate degree.
- Infant School Teacher undergraduate degree.
- Social Education undergraduate degree.

- Autonomous and self-regulated learning.
- Interdisciplinary knowledge.
- Digital competence.
- Collaborative and problem-based learning.
- Opportunities and limitations for anchoring the DIYLab programme to the curriculum.





Second step Conducting focus groups

Participants

Estudiantes

2 students of the Pedagogy degree.

2 students of the Social Education Degree.

1 student of the Primary School Teacher degree.

Docentes

1 of the Department of Didactics of Musical and Body Expression

2 of the Department of Theory and History of Education.

1 of the Department of Research Methods and Diagnosis in Education.

1 of the Department of Didactics and Educational Management.

1 of the Department of Didactics of Experimental Sciences and Mathematics.

Table 1: Composition of the 2 focus groups

Categories to analyze

- Knowledge and evaluation of the notion of DIY.
- Autonomous and self-regulating learning.
- Interdisciplinary knowledge.
- Digital competence.
- Collaborative and problem-based learning.
- How to frame the project considering the formal aspects of the curriculum.
- Emerging elements befitting each situation.

3. Outcomes



3.1 The strengths of the institution in relation to the project

3.2 The difficulties in implementing the project at the institution

3.3 The arising questions and challenges



3.1 The strengths of the institution in relation to the project

- They value **positively the implementation** of this project, emphasizing the active role of the students (Faculty members).
- They highlight the need of **teachers who guide** the project (Students)
- The importance of applying knowledge (Students and Faculty members)



3.2 The difficulties in implementing the project at the institution

- The teachers explained their **difficulties in the command** of the **digital competence** and the students to the **group work**.
- The students think that the most widespread **attitude and role of university teachers and students** are not the most appropriate.



3.3 The arising questions and challenges

- Students' motivation to develop their projects and initiatives.
- The autonomy of the students to focus and manage their learning practices.
- Relationship and connections between what students do and learn inside and outside the university.
- The use of digital resources..



4. Conclusions



New real scenarios that respond to the needs of each context with a comprehensive and innovative structure

References

- Buckingham, D. (2007). Beyond Technology: Children's Learning in the Age of Digital Culture. Cambridge: Polity Press.
- Denzin, N. (1997). Interpretative Ethnography. Thousand Oaks, CA: Sage
- Eisenberg, M. & Buechley, L. (2008). Pervasive Fabrication: Making Construction Ubiquitous in Education. *Journal of Software, 3*(4), 62–68. doi:10.4304/jsw.3.4.62-68
- Giró, X. (2014) Presentación del DIYLab. Esbrina Research Group. University of Barcelona. Retrieved from http://diylab.eu/docs/Presentacio_DIYLab.pdf
- Guzzetti, B., Elliott, K. & Welsch, D. (2010). *DIY Media in the Classroom*. New York, NY: Teachers College Press.
- Green, J. L., Camill, G. & Elmore, P. B. (2006). Handbook of Complementary Methods in Education Research. Routledge AERA.
- Kafai, Y. B. & Peppler, K. A. (2011). Developing Participatory Competencies in Creative Media Production. *Review of Research in Education*, 35(1), 89-119. doi: 10.3102/0091732x10383211
- Kop, R. & Hill. A. (2008). Connectivism: Learning theory of the future or vestige of the past? *The international Review of Research in Open and Distributed Learning*, *9*(3). Retrieved from http://www.irrodl.org/index.php/irrodl/article/viewArticle/523/1103%2522.
- Lankshear, M. & Knobel, C. (Eds.). (2010). DIY media. Creating, sharing and learning with new technologies. New York, NY: Peter Lang
- McKay, G. (1998). DIY culture: Notes towards an intro. In G. McKay (Ed.), *DIY Culture: Party and Protest in Nineties Britain* (pp. 1-53). London: Verso
- Reason, P. & Bradbury, H. (2001). Handbook of action research. Participative inquiry and practice. London: Sage.
- Siemens, G. (2008). Learning and knowing in networks: Changing roles for educators and designers. Paper 105: University of Georgia IT Forum. Retrieved from http://it.coe.uga.edu/itforum/Paper105/Siemens.pdf
- Spencer, A. (2005). *DIY. The rise of Lo-Fi culture*. London: Marion Boyars.



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