

Envisioning DIY learning in primary and secondary schools

Rachel Fendler, rachel.fendler@ub.edu

Fernando Hernández-Hernández, fdohernandez@ub.edu

Juana Maria Sancho Gil, juanamsancho@ub.edu

University of Barcelona



From digital competence to "DIY" learning

Our understanding of digital competences has shifted from considering young people's critical understanding of new media as one key aspect of digital literacy (Buckingham, 2003; Gilster, 1997)

... towards thinking about the educational potential of "participatory culture" (Jenkins, et al, 2009)



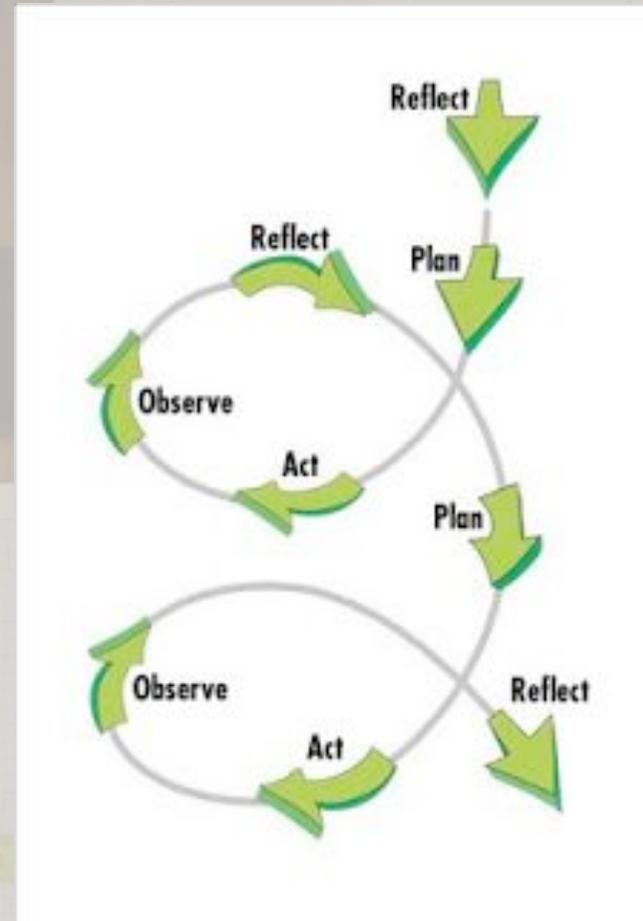
COLLABORATIVE ACTION RESEARCH

This project will use CAR,
understood as:

“A participatory, democratic process,
concerned with developing practical
knowing in the pursuit of worthwhile
human purposes, grounded in a
participatory worldview ...

It seeks to bring together action and
reflection, theory and practice, in
participation with others, in the pursuit
of practical solutions to issues of
pressing concern to people, and more
generally the flourishing of the
individual persons and their
communities.”

(Reason and Bradbury, 2001: 1).



THE ETHNOGRAPHIC PERSPECTIVE

DIYLab

→ Action research

The ethnographic study

To borrow from Hine's (2000) categorization, we consider online environments as culture (rather than cultural artefact) and are attentive to the potential *culture shock* that may result from the implementation of this project.



FOCUS GROUPS IN THE SPANISH CONTEXT

School	Focus group participants
Primary	<ul style="list-style-type: none">• 6 students who are, or are about to be 5th-year students• 5 5th-year teachers• 6 parents of 5th-year students
Secondary	<ul style="list-style-type: none">• 6 students who are, or are about to be 3rd-year school students• 6 teachers of 3rd-year secondary school students• 6 parents of 3rd-year secondary school students
University	5 students (2 Pedagogy, 1 Early childhood, 2 Social Education)

Focus groups responses on DIY learning in school

IN School

Design your own app (computer class)

The "Entrepreneurship project": in the class Educating Citizens, the project allows students to design their own businesses.

Lego League: an extracurricular project that is "really fun!" A parent comments that "the participation is horizontal and the kids teach each other."

School open house. The event when the school is open to the perspective and current students' families. Students collaborate organizing the activities and exhibits.

Extracurricular activities offered during school hours, such as the "Midday workshop" or "Public speaking workshop".

"Synthesis credit" project: "We have to work on a specific theme, but aside from that we can do what we want."



Focus groups responses on DIY learning outside school

OUTSIDE School

TV: teaches "basic life skills."

School exchanges

Video tutorials.

"You can always find a tutorial there if you need it."

Books. "You can learn as much from books as you do from clicking around on ClickEdu (a language platform)."

Music. "Many kids in English class aren't interested and they don't learn... but then when a song becomes popular, listening to the lyrics, they begin to understand."

Scripts: an online messaging game

El rincón del vago (in English: The slacker's corner): A website "where people upload their schoolwork, and it's there, you share it."

Yahoo Answers



Focus groups responses: Possible points of tension introduced by DIY Learning

A. DOES DIY REPLACE THE TEACHER?

“when the kids design their own learning, autonomously, using new technologies, what is the role of the teacher? What will that look like?”

B. TO WHAT EXTENT DO STUDENTS WANT MORE RESPONSIBILITY?

“Internet is a space where you can get information about DIY... but it also allows you to copy, slack off, and get distracted!”
“When you get more freedom at school and some are like, OK, I’ll go home...”

C. WHAT HAPPENS TO ASSESSMENT?

There is already an acknowledgement that assessment is problematic and removing any form of standardization in the learning process makes the exercise even less transparent.



DETECTING NARRATIVES

In order to promote the sustainability of the project within the participating schools, and perhaps beyond, it is important to understand how DIY may be successfully incorporated into the school culture and what tensions it may provoke.

This means we cannot only research how students and teachers engage with DIY but also, how that experience affects local understandings of learning, student agency, the role of teachers, and the place for digital tools and online platforms within the school curriculum.

1. THE IDEA THAT CHILDREN ARE "DIGITAL NATIVES" IS STILL A PERVASIVE DISCOURSE

"Using new technologies, they can do it all (websites, groups...). It's as if they've forgotten their hands, or their imagination, at least the way we understood them." - Parent

2. THE INTERNET AS AN ARCHIVE OF OPEN-SOURCE MATERIALS

There is a tension that arises when discussing open-source materials, because they are seen as both a fund of knowledge and a potential shortcut, allowing you to get a result without doing the work.

3. CONNECTIVITY AS A WAY OF LIVING (AND LEARNING)

“They [the young people] have learned to be permanently connected to a virtual world, which we didn’t have when we were students. This gives them a great window for sharing their feelings, experiences, opinions... A bunch of things... they spend all day sharing.” – Parent

4. VIRTUAL SPACE AS A SITE OF INFINITE DIFFERENTIATION

The focus groups talk about what it means to have a “solid foundation” representing two schools of thought.

- On one hand, it refers to a predetermined set of facts about the world and standards for resolving problems, organized in order from more simple to more complex (Sawyer, 2008).
- On the other hand, an idea emerges that involves a set of knowledge and skills developed by not only focusing on what to learn, but also on *how, why and for whom*.

LOOKING AHEAD...



DIY v AUTONOMOUS LEARNING

The concept of DIY troubles basic understandings of schooling, like the core curriculum, the role of teachers and students, and assessment frameworks.

LOOKING AHEAD...



FOCUSING ON THE COLLECTIVE

Moving from a discourse on open-source materials and access to information, towards thinking about how to participate in and benefit from collaborative learning environments.



REFERENCES

Hine, C. (2000). *Virtual ethnography*. London: Sage.

Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., Robison, A.J. (2009). *Confronting the Challenges of Participatory Culture. Media Education for the 21st Century*. Cambridge, MA: MIT Press.

Reason, P. & Bradbury, H. (2001). *Handbook of action research. Participative inquiry and practice*. London: Sage.

Sawyer, R. K. (2008). *Optimising Learning Implications of Learning Sciences Research*. Paris. OECD.