

## *Original Paper*

# The Weblog. A Log Used as a Complement to the Paper Log.

## Subtopic: New Pedagogical Techniques for the Teaching of Graphic Expression, Integration of ICTs.

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### ***Abstract***

*Within the framework of the subject of Representation in the course of studies in Architecture at Blas Pascal University (UBP), the following teaching object is proposed, which claims to continue the work began in Egrafia 2016 “Challenging the sketch, beyond a log”, regarding the new Technologies in Architectural Representation.*

*It is presented as a complement to the freehand draw and to learn other intuitive and sensory techniques of representation by using technological devices and editing applications.*

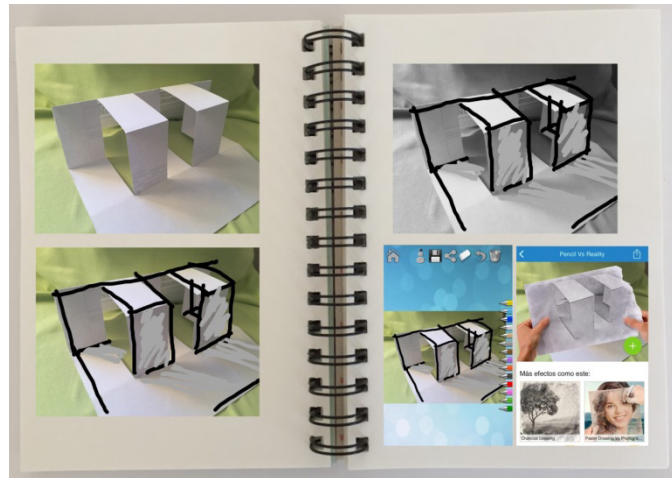
*It suggests the use of the mobile device, cell phones, tablets, etc., in the workshop and possible drawing APP: Adobe Draw, Adobe Ideas and Tayasui sketches.*

*Scope and possible teaching applications:*

*Students can work on a weblog as a complement to a paper log.*

*It suggests the integration of other courses of studies at the university, for example with students of the course of studies in Graphic Design, Cinema, Engineering, etc.*

*In the course of studies in Architecture, its objective is the integration of different subjects, such as Representation, Visual Language, Landscape, Interior Design, Electives of Representation, etc., by generating a common digital format for presentations in different stages of the project.*



**Weblog App Image. UBP Students.**

### ***Keywords***

*innovation, app, integration, interaction, creativity, education*

### **1. Introduction**

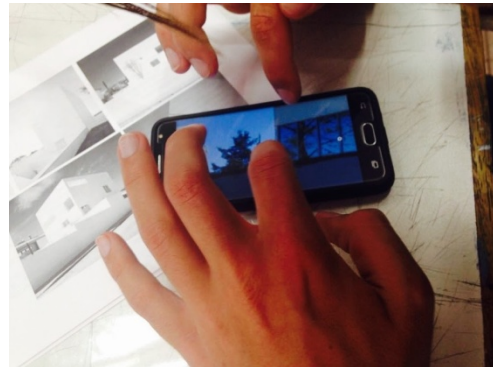
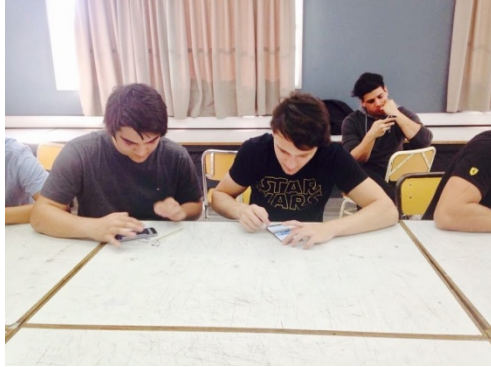
Within the framework of the subject of Representation in the course of studies in Architecture at Blas Pascal University in Córdoba, the development and design of this didactic strategy is suggested, which aims at enriching and exploring several digital drawing techniques at the workshop. The initiative rises from the concern of the need to rethink and adapt methods, ways and tools of learning in the teaching of Architecture and particularly Representation, in the current conditions and characteristics of our students.

“The learning environments, such as we know them, have begun to change at present to adapt to the information society. However, in the classroom, the teaching-learning processes that take place in traditional educational institutions seem to show certain inflexibility for a future education and they require major adaptations for this” (Salinas J., 1997). It is in the framework of the classroom where the main changes should be brought about and it is the teacher and the didactic teaching strategies employed which play a vital role to change and motivate students.

New and various technological devices and applications are part of our educational reality, they are part of the didactic processes and they are the basis of communication and personal interactions capable of generating a new social construction of knowledge integrated with technologies.

Exploring other didactic strategies and new learning experiences, and incorporating these new tools of easy access and use to traditional knowledge will trigger new creative and innovative processes in teaching. It will also allow new approaches, concepts and theoretical-academic background linked to the imagination, the design process and the expressive qualities in the representation of the architectural project.

It is a highly flexible tool to be used individually or collectively. The use of these technological tools in everyday devices for students, allow activities and experiences ONLINE, IN STREAMING, sharing them with their peers and with other teams/groups/distance-learning workshops. (Figures 1 and 2)



**Figures 1 and 2. A Full-Day Workshop Using Drawings App. UBP**

These APPs represent a new way to connect these different means of communication. They are generating units of a “real time” infrastructure among students, designers, artists, and teachers.

They mean an opportunity to improve the collaborative and collective design among different disciplines and subjects. They are part of a virtual platform/support that integrate theoretical and practical contents vertically and horizontally. They allow us to take this design network anywhere as a platform/dynamic support capable of combining different ideas, knowledge, culture.

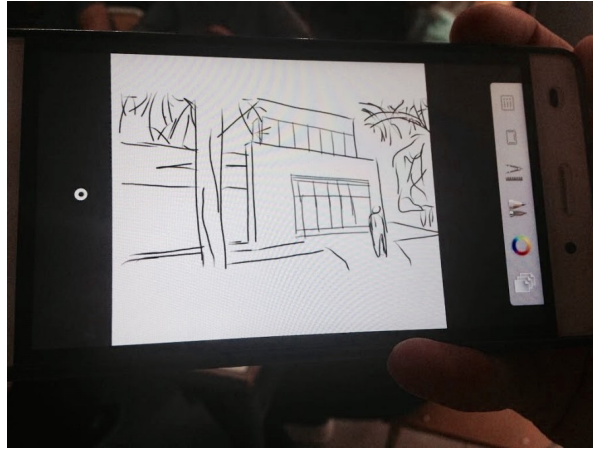
We assume that the incorporation of pedagogical tools, which aims at breaking rigid curricular and classroom structures, considering the classroom/workshop as a space of integration and academic interaction, improves the quality conditions of individual and collective work, enriching the relationship of teachers and students with relevant academic results.

## **2. Method and Material**

### *2.1 Methodology/Design Didactic Strategy*

The methodological process starts with the analysis, recognition and identification of possible PPPs and available devices for a specific activity: the freehand drawing, the sketch.

The versatility of these APP allows to generate graphic pieces and real and imaginary models, reconstruct spatialities, and transform them through the resource of the edition. The sketches and imagined reproductions can be manipulated, combined and modified in different media, generating a constant dynamic between the space of the real and the imaginary. (Figure 3)



**Figure 3. Application of Effects on Image. Use of App**

The dynamic of these APP in the field of photography, leads us to compare it with the tool of “tracing”, traditional resource, sometimes armed spontaneously, with a glass and a lamp, which allows us to learn to sketch through the transparency, recognize and identify lines, lines, proportions, leaks, scales. Today the devices gather all these tools in the same APP, including the option to edit. (Figure 4)



**Figure 4. Corque Digital Tracing Real Image**

The diagramming of the activity is fundamental for the development of the same and the success of the exploration. Stages, goals and objectives are programmed, with the support of theoretical contents of the subject, for a later analysis of the results.

The activity begins with the selection of different perspectives and spatialities to be intervened or recreated, interior or exterior. (Figure 5)



**Figure 5. Start to Sketch, Selection of Interior Space**

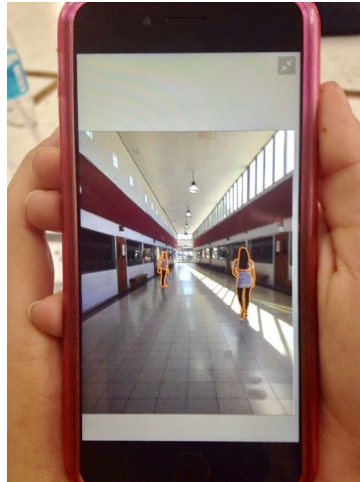
Then the APP is defined to use more convenient for the graphic piece to recreate and the effect to look for. The role of analysis and association of the variables and the knowledge acquired by the students regarding the available methods, techniques and tools plays a fundamental role there. A range of possibilities opens up in front of the NEW ALTERNATIVE SYSTEMS of representation.

The sketches and models can be developed through different METHODS, making a free-hand sketch from some APP of the selected device (Figure 3) or taking photographs to be later intervened (Figures 6 and 7). NEW PROCEDURES appear identifying the traditional elements of free drawing, the horizon line, vanishing points, in integration with technology.



**Figures 6 and 7. Corro of Interior Space with Tracing Technique**

The sketches and photographs can be superimposed with sketches or annotations, for a transparent debate/criticism about virtues and weaknesses, opportunities and possible modifications with a proactive criterion. There is an “Eyetime” function, which tells users which images have received the most attention from their colleagues. NEW GRAPHIC PIECES appear, as a result of the combination with new technologies.



**Figure 8. Recognition and Tracing of Human Figure, Horizon Line, Scale, Vanishing Point, etc.**

Lines and strokes can be exercised to soften the hand at the time of sketching and incorporate different techniques and methods to improve expressiveness and sensitivity.

They serve as a VERIFICATION METHOD in the design process, and as an ASSESSMENT of an idea and the process and methodology used.

APP Used during the activity:

ADOBE DRAW-SKETCHBOOK for Android and IOS.

Other APP: Photoshop Mix-Capture CC-Color CC-iFont-Over-Behance

APP CRIT-Functions of the APP:

MESSAGE: Write, make a sketch or add comments

INVITE: Share the work or images with your team instantly

SKETCH: mark or draw on any image

ALERTS: Notifications when someone comments

EYETIME: Discover the images that receive the most attention

SIMPLE: Easy to use, friendly interface

IMPORT: From photos, camera and more

EDIT: Manage titles and participants

PROFILE: Create a personal profile

PAPER: Choose yellow or white trace and adjust transparency.

### **3. Result and Discussion**

#### *3.1 Development/Horizons of Multiples Possibilities*

The proposal refers to expanding the horizon of possibility of the “sketch” as a traditional architectural thinking tool capable of integrating with new technologies. It is valued for its ability to generate new alternatives for registration, prefiguration and planning.



Didactic strategies of this type allow us to discover new educational perspectives and options, generate new dynamics in the classroom's workshop space, and configure themselves as triggers for innovative, creative and interactive project activities and experiences.

Jorge Sarquis (Sarquis J., 2014) defines the "path from" that every design process implies as a result not prefigured, but open, that is appearing progressively, in the way of arriving at a project, therefore it is a path with uncertainties and it is the teacher as a guiding and motivating guide who should encourage the student to discover a technique in their work, to generate know-how, to create their own vision of the world, their own discourse and their own metacognitive process.

"The students integrate not only content but also a work modality of the current circumstances through the experience of the same teaching work. Integration, interdisciplinary, teamwork are not mere statements, they are everyday experiences of academic work".

The didactic strategies come from the programmed combination of several methods. The transfer of content to new formats linked to technology allows sharing the activity with other disciplines and levels (inverted classroom). The teacher assumes a new role in this learning process, accompanying the students in the exploration, appears as the guide and support figure of the activity.

-Development and construction of "techno-thoughts" with the incorporation of technology to art and design.

-Development of critical thinking and self-evaluation.

-Development of collective and collaborative learning.

-Open the teaching-learning model to a new, more active and open model, capable of creating new relationships, more participatory and collaborative.

To carry out this methodology, the following elements are fundamental:

Flexible environments for learning, that encourage integration and participation, that allow the student to choose where and how to learn.

Different tools, traditional and alternative, open to exploration, to the search and discovery of new variables and results, analog, digital, etc., that serve as a vehicle for reflection and the construction of thought.

The comparative, critical, evaluative evaluation that measures understanding in a meaningful way for students.

The present activity, applied in 2017 in the field Representation 2, seems not to exhaust its possibilities to the latest experiences and results obtained. On the contrary, it opens a diverse and multiple field of action.

The objective of the didactic strategy is to create, as a complement to a paper log, a digital log, also in application format, feasible to be carried in electronic devices of daily use, accessible and editable from any place. This encourages the use of the digital blog not only within the academy but included outside the classroom space.

Said binnara will be able to concentrate project instances of several subjects at the same time and operationally form part of the practice modality of the architecture career of the UBP.

The practicum is a curricular space, based on the theory of PRACTICUM REFLEXIVUM by Donald Schön, where the architecture workshop is conceived as a space of integration and academic investment of the different subjects that constitute the backbone of the formation of the student in each year.

If the subjects share and tackle content about the same project, the digital log can be a presentation tool in the Practicum instance.

In the course of the race, an activity can be carried out as a workshop for the design of the Digital Logbook format. The design of a general Layout of common use and a specific Layout by subject, activity or level.

The Digital Bitácora will be able to summon a Contest among students, thus generating a new activity in the career and in the university, with the possibility of making an exhibition or an extension work.

Also as possible Layout (Lamina Synthesis) for the inscription modality to the examination shifts.

Within the university one could work interdisciplinary with other careers (of Graphic Design and/or Systems Engineering) for the design of the digital logbook and possibilities of image editing in app format, typical of the institution.

#### **4. Discussion/Conclusion**

The horizon of action seems to be infinite and diverse. From the pedagogical point of view, collective and collaborative work between teachers and students is proposed. Exploring as a team, as peers, sharing knowledge and discoveries helps to strengthen relationships, participation, integration and a common reflection of the group.

We believe that a University should be the center of debate, promoter of new trends, questioning and interpreting from education itself, seeking to be holistic and innovative. And, therefore, also be self-critical: rethink careers, curricula, the same classrooms. We understand that an architecture school is through teachers and students.

A new way of learning, a didactic, ludic, self-constructivist, intuitive model, associated with digital processing. It is able to combine knowledge and traditional theoretical-practical tools with new technological resources that are transforming the ways of thinking and creating through the holistic interpretation itself.

Today it represents a tendency and an opportunity for students and professionals to have a Digital Log in their personal devices, with their projects, ideas and sketches.

In European schools the digital format means a sustainable option and complement the paper format.

The way in the teaching of architecture seems to be that, not only capacity for adaptation and constant innovation, but also for activities aimed at breaking the protocol, energizing the course, defining



inter-level activities, betting on the use of new interesting media to revive the energy of production, to deepen and build-daily and collectively-the spirit of the workshop.

Specifically for company clear energy saving potentials come up. An intensive analysis of the single company is necessary for the implementation of these potentials to optimize the cost situation as well as the environmental effect. In particular with new- and reinvestment the specific energy consumption of the single components should be included. An increasing importance comes up in view of high energy prices to the consideration of the operational development.

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