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Latin American universities and digital craft: Reaching out to regional development (Conference Paper)

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Abstract

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This research identifies and analyzes the interaction between universities and craft experiences, with communities in different cities and towns in Latin America. These interactions use as link two technologies: digital fabrication and, as an emergent alternative, computational design. Case studies reveal interactions from the universities, specifically schools of architecture, design or engineering, to regional communities, and from them back to universities. We emphasize in advantages, lacks and problems, to be taken into account for future sustainable implementations. Processes establish links with regional production, seeking to empower it through the incorporation of new technologies, framed by teaching-learning experiences. Universities set passive assistance aside, to opt for a real collaborative learning that benefits students, teachers and societies. © 2019 IEEE.

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The transition from computer representation and simulation to digital fabrication at the end of the first decade of the 21st century opens up immediate possibilities for the control of personalized production. This way of obtaining things, without relying on a specialized fabrication industry will facilitate the integration to Industry 4.0 and the Internet of

things (IoT). At this point, the centers of artisanal production will be specialized laboratories, like case of the Cooperative of craftsmen of México that started from a project financed by the National Council of Science and Technology to implement Fab Labs.

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