



Informal Learning Environments: Do They Matter?

SCUP Mid-Atlantic 2019 Symposium



Learning: What Does the Literature Say?

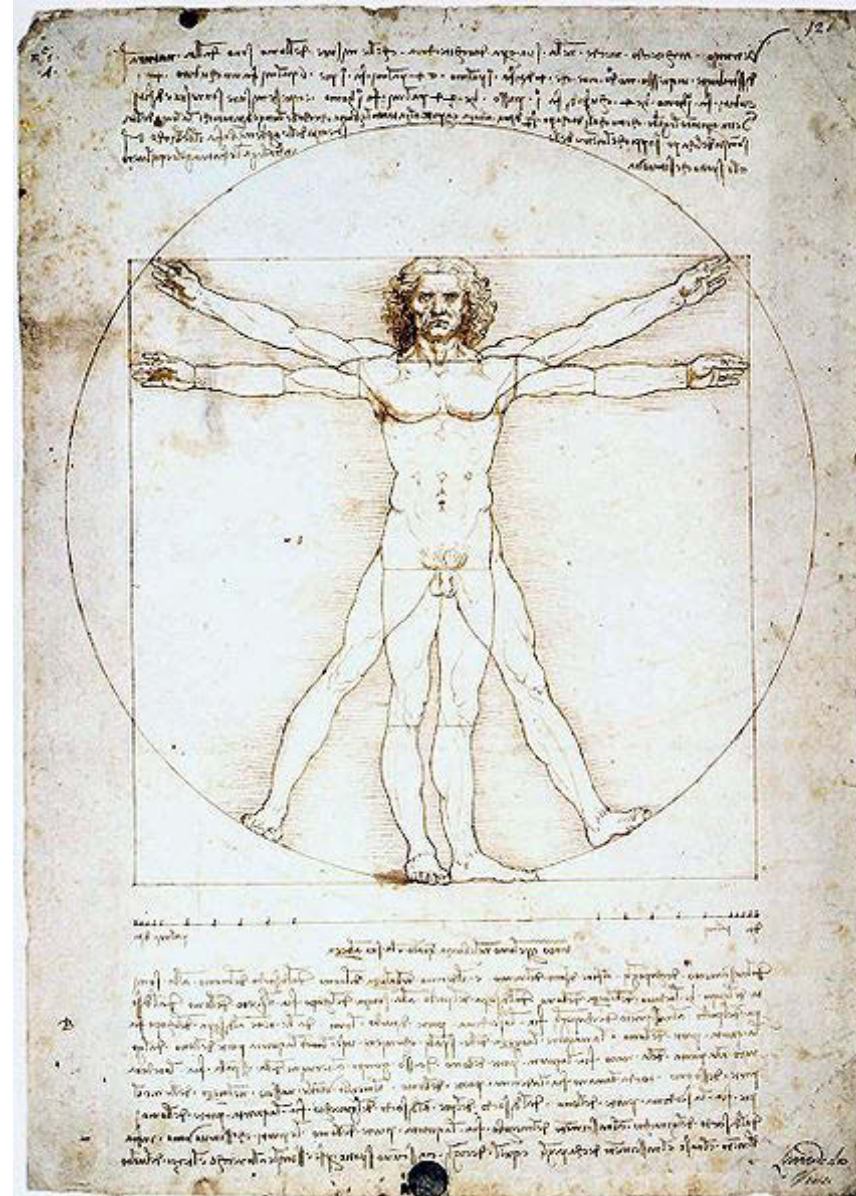
David Zaiser
Whitman Requardt & Associates

Informal Learning Environments: Do They Matter?
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How do we learn?

Two Perspectives

Psychological / Anatomical
Brain-based



How do we learn?

Two Perspectives

Psychological / Anatomical
Brain-based

Sociological
Experiential / Contextual



John the Baptist Preaching
Pieter Bruegel the Younger

Physiological / Anatomical View

Learning is a process of building neural networks¹

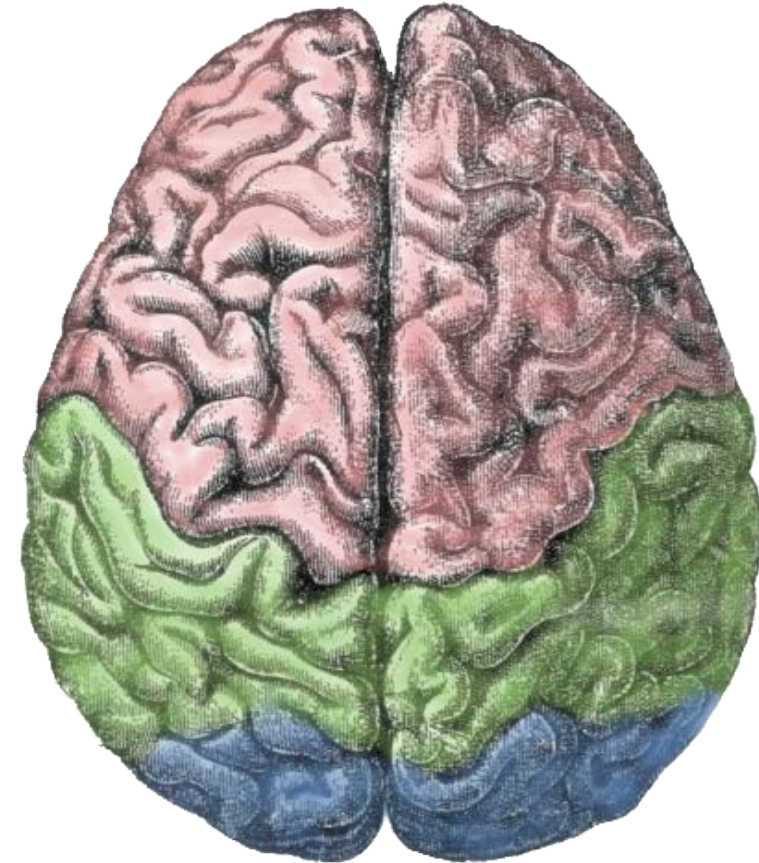
Learning is a primary brain function

We are learning (almost) all of the time

We use our whole brains

Everything in our memory begins as a sensory input from our environment

99% of all sensory stimuli is discarded immediately upon entering the brain



¹Patricia Wolfe, *Brain Matters: Translating Research into Classroom Practice*, second ed., 2010

Physiological / Anatomical View

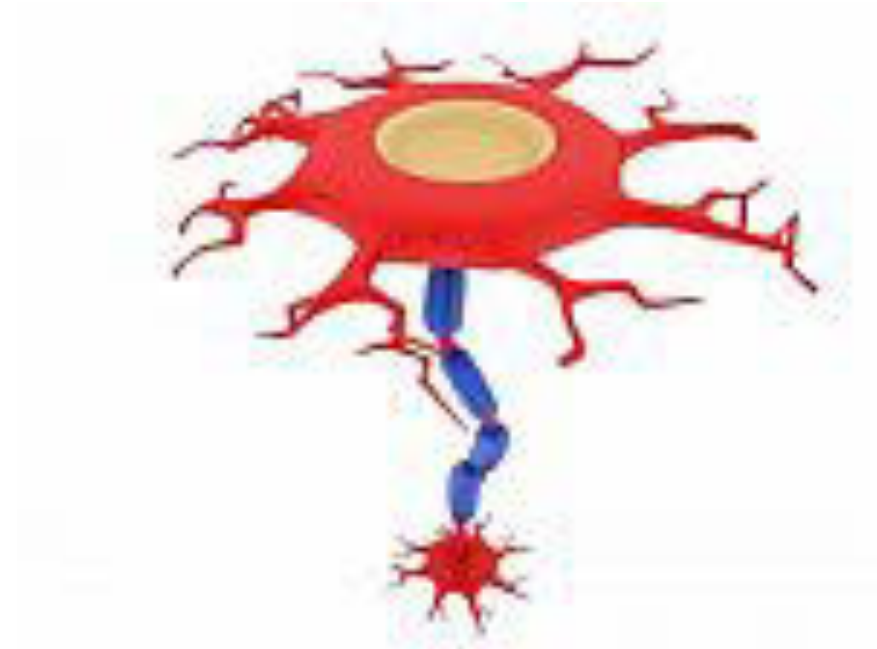
Knowledge is the result of brain plasticity

Brain plasticity = new neurons + dendrite activity

Neurons have 6,000 – 10,000 dendrites

Connections become more persistent the more they are triggered

Brain plasticity is greatest when environment is highly interactive and encourages risk-taking



Physiological /Anatomical View

Active Learning (Multi-sensory)

Not “Sit and Git”

“Anything that involves students in doing things and thinking about things they are doing.”

Bonwell & Elson, 1991

“What we have learned, I think, is that the most effective learning is active learning”

Prof. Stanley Katz, Woodrow Wilson School,
Princeton University



Physiological /Anatomical View

Innate search for meaning

Goal of creating a world construct

New knowledge builds on old

Meaning and emotion play major roles

It's time-consuming



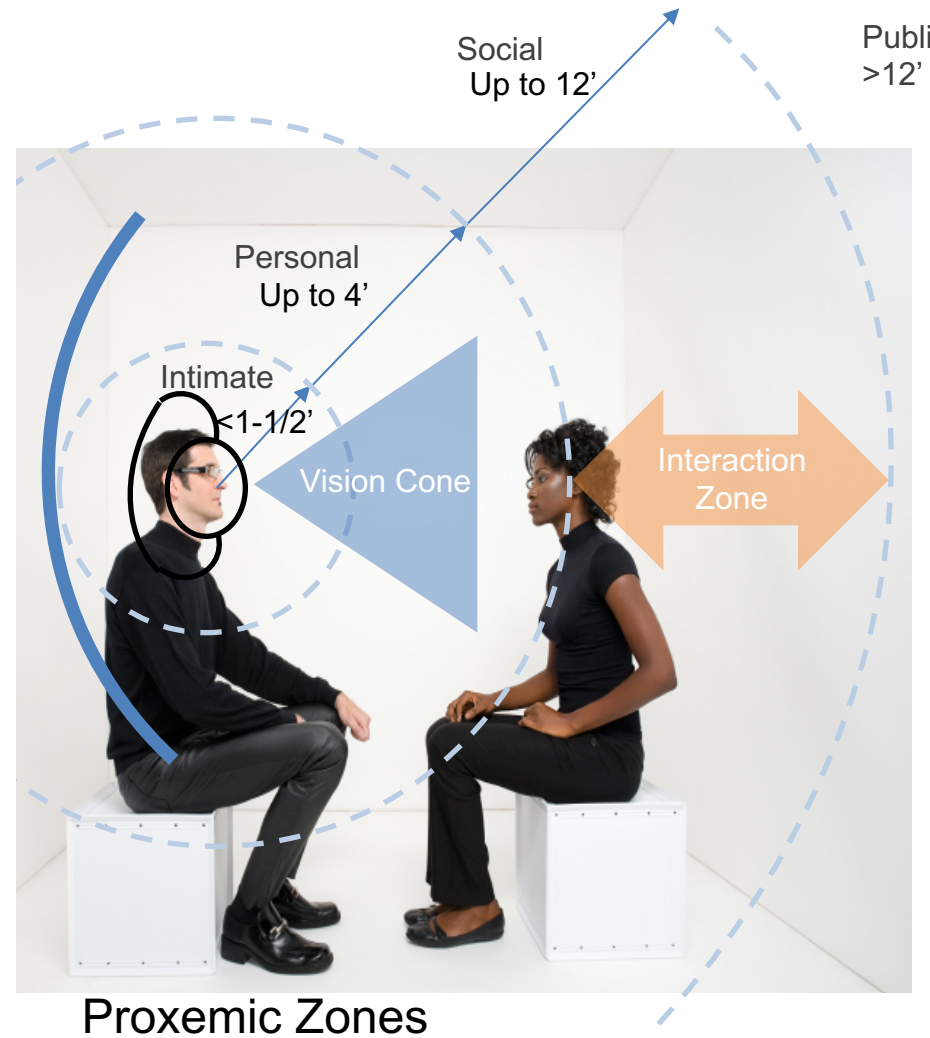
Learning: What Does the Literature Say?

Sociological View

Learning is controlled by social norms

Social archetypes affect engagement

Social distance (proximity)



Sociological View

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Social archetypes affect engagement

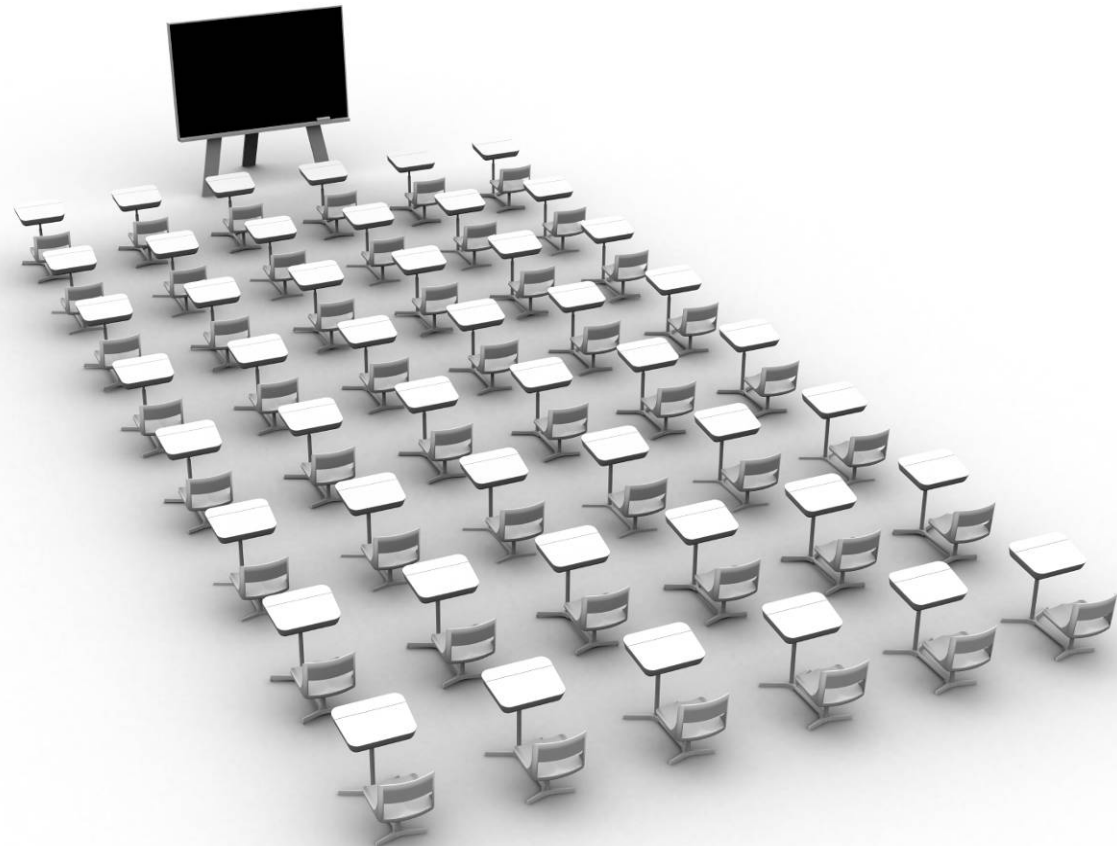
Social distance (proximity)

Sociofugal and sociopetal

Furniture / physical space

In Sync: Environmental Behavior Research and the Design of Learning Spaces

Lennie Scott-Webber



Sociological View

Impact of Environment

Almost any form of student involvement benefits learning and student development

Study time (time on task) had numerous positive academic outcomes

Cooperative learning has enumerable benefits

Peer group interaction is the most important factor in academic and personal development

Four Critical Years, 1977

Alexander Astin

What Matters in College, 1993

Alexander Astin



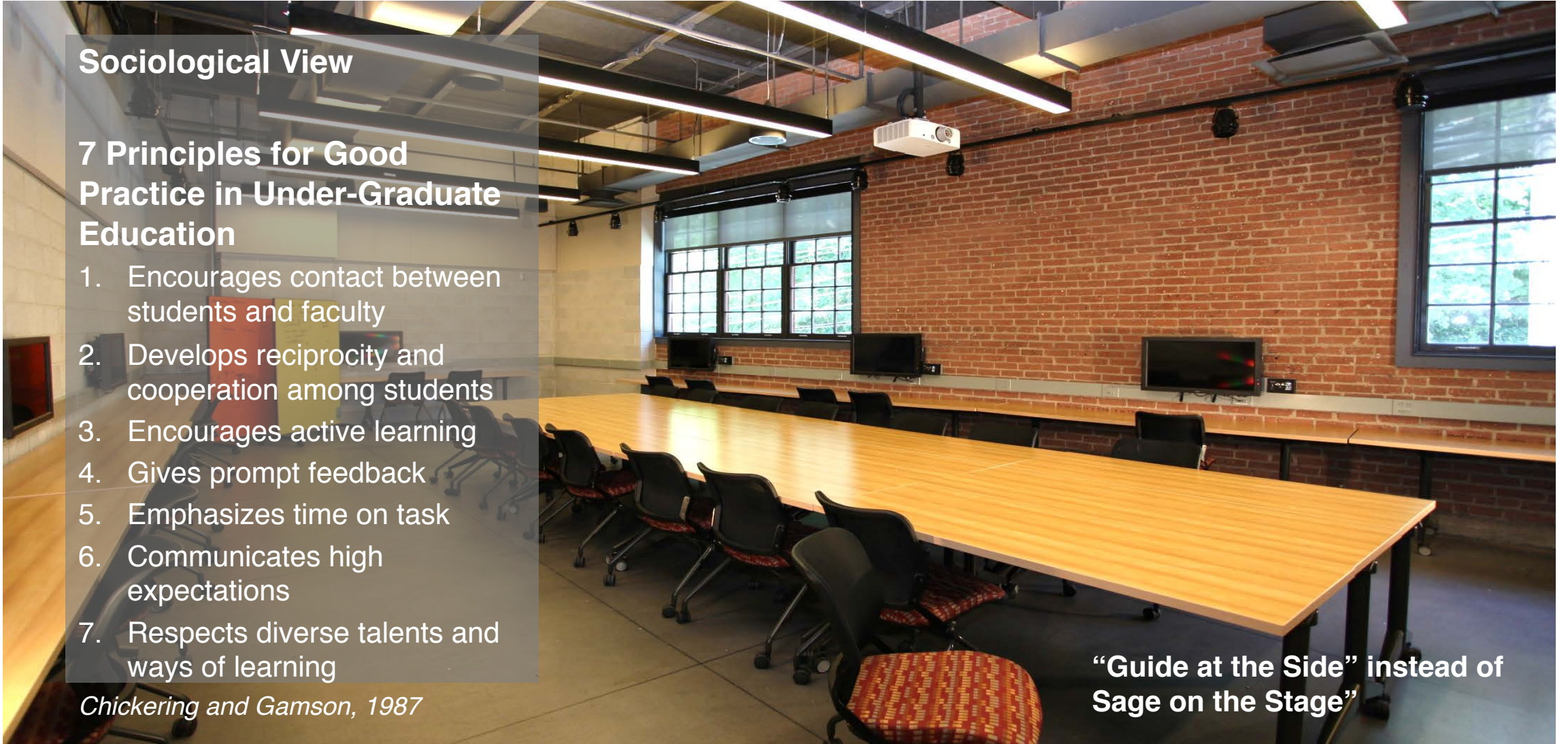
Sociological View

7 Principles for Good Practice in Under-Graduate Education

1. Encourages contact between students and faculty
2. Develops reciprocity and cooperation among students
3. Encourages active learning
4. Gives prompt feedback
5. Emphasizes time on task
6. Communicates high expectations
7. Respects diverse talents and ways of learning

Chickering and Gamson, 1987

**“Guide at the Side” instead of
Sage on the Stage”**



Learning: What Does the Literature Say?

Sociological View

Membership is the ultimate goal of a learning community

Build Community (environment must be purposeful, open, just, disciplined, caring and celebrative)

Carnegie Foundation and Dr. Ernest Boyer (1990)

Engagement is the most important factor in student success (graduation)

Engagement is synonymous to community membership

National Survey of Student Engagement (NSSE)

Dr. George Kuh (1999)



Educating by Design
Strange and Banning (2015)

Sociological View

Architecture affects community-building, engagement

Physical space, human aggregate, organizational structures, constructed culture all shape the student experience (Strange & Banning)

Location is a critical consideration

Susan Painter's Rule of 400

“Community cannot form in the absence of communal space.”

Duany, Plater-Zyberk, Speck

Suburban Nation: the Rise of Sprawl and the Decline of the American Dream (2000)



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