Fundamental Skills for Planners.

For the planning profession to survive and prosper, its practitioners need to find a position of strength in a broad range of topics. Typically, planners are taught items 1-6 below plus specialties like historic preservation, pedestrianism and affordable housing; each important but not part of a "core" education program.

Items 7-12 are rarely taught even though knowledge of these topics is critical to planners, especially as they rise through the ranks to senior positions. Even a cursory understanding of this wide range of issues will create an awareness of their importance and a mental note of the principles involved. The discussion below presents information about sources of information to facilitate self-learning. A lack of knowledge in a breadth of disciplines makes it increasingly easy for usurpers to intrude into the planning profession: the attorneys, architects, landscape architects, engineers, accountants and scientists.

TRADITIONALLY TAUGHT AT THE GRADUATE LEVEL:

- 1. Fundamental natural system functions and relationships [air, water, land]
- 2. Land use and transportation planning
- 3. Planning and zoning regulations
- 4. Urban design
- 5. Economic planning
 - a. Economic development
 - b. Public finance
 - c. Development programming
- 6. Infrastructure fundamentals

RARELY TAUGHT AT THE GRADUATE LEVEL:

- 7. The principles of design; especially sketching
- 8. Sociological principles for society
- 9. Management
- 10. Communication skills: face to face & remote
- 11. Systems analysis
- 12. Teaching and learning

A Self-Study Course in Rarely Taught Planning Skills.

The principles of design; sketching urban form and details.

Many planning programs refuse to teach design principles and sketching. Sketching is a primary communication tool that greatly enhances messaging and illustration of the impact of planning ideas. The point is not to be an artist, but to feel comfortable with pencil and paper drawing, for example, the relationship between funding sources, wetland/upland ideas, land use and circulation networks and street sections. Learning to sketch is an important skill for the planning professional.

Check out:

Visual Explanations, Images and Quantities, Evidence and Narrative, Edward R.Tufte, Graphics Press, Connecticut, 156 pp., 1997.



Discussions using a sketching.



Communicating.

Sociological principles for society.

Sociology is the discipline of issues at the heart of every community; the study of how people get along in groups and relate to each other. A discipline not often found in planning curriculums.

Check out:

Urban Sociology, A Human Ecology Perspective, William A. Schwab, ADDISON-Wesley Publishing Company, 1982.

The Social Life of Small Urban Spaces, William H. Whyte (Author, 1917 - 1999), Project for Public Spaces, New York, 1980.

Communication skills: face to face & remote interactions.

Planners claim to be great communicators but generally rely on intuition rather than training. Communication is an art and science worthy of a significant time investment. The world of advertising is the point of the spear in communicating skills. The work of Katzenbach and Smith reminds us that communication within the team is critical causing a "team" to be different than a collection of people.

Check out:

Ogilvy on Advertising, David Ogilvy, Vintage Books, A Division of Random House, NY, 1985. *The Wisdom of Teams, Creating the High Performance Organization,* Jon R. Katzenbach and Dougas K. Smith, Harper Collins Publishers, NY, 320 pp., 1993.

Systems analysis.

Cities are systems, infrastructure is packaged in systems, planning uses land use systems. Learning and practicing the skills of a trained systems analyst help accomplish planning goals.

Check out:

Thinking in Systems: A Primer, <u>Donella H. Meadows</u> (Author), <u>Diana Wright</u> (Editor), Chelsea Green Publishing, Vermont, 2008. Ms. Meadows was on the team when the Club of Rome produced *The Limits of Growth*, the quintessential use of systems analysis to study growth issues.

Management.

Management is a term used frequently without real understanding. The planning profession deals with growth management, project management, resource management, performance management and recently, data management. The emphasis is usually on growth, projects, performance, resources and data without a real appreciation of how to fully exploit the skills of management. Peter Drucker is the guru of management and his ideas warrant study. Clark and Burstein/Stasiowski offer management applications to planning professionals. Houghton is a favorite because his discipline comes from left field, The Movies, yet what a producer does is directly useful to what a planner does. Houghton's book proves that good ideas can come from anywhere.

Check out:

Management: Tasks, Responsibilities, Practices, Peter Drucker, Harper & Row, New York, 1974. *Project Management for Planners,* <u>Terry A. Clark</u>, AICP, PMP, first published by the American Planning Association, 2002; then Routledge, NY, 2017.

Project Management for the Design Professional: A Handbook for Architects, Engineers, and Interior Designers, Hardcover, <u>David Burstein</u> (Author), <u>Frank Stasiowski</u> (Author), original copyright 1982, Whitney Library of Design, Billboard Publications, New York, new edition November 1, 1991.

What a Producer Does: The Art of Moviemaking (not the Business), <u>Buck Houghton</u>, Silman-James Press, <u>Buck Houghton</u>, Silman-James Press, 200 pp., 1991.





Searching for Excellenc

Excellence.

Tom Peters is THE source for quality discussions. His seminal work, *In Search of Excellence*, set the bar for the subject. Similarly, the Cleveland Clinic sets the standard for quality in health care with lessons applicable to city planning.

Check out:

The Excellence Dividend: Meeting the Tech Tide with Work That Wows and Jobs That Last, by <u>Tom Peters</u> (Author), Vintage Books, A Division of Penguin Random House LLC, NY, 2018. *The Cleveland Clinic Way, Lessons in Excellence From One of the World's Leading Healthcare Organizations,* Toby Cosgrove, MD., McGraw-Hill Education, 2014.

Financial planning.

The challenge for public agencies is to secure a reliable source of funding over the next few decades. Tax revenues are being eroded; state and federal funding is precarious. User fees make sense for many services provided by government but many services are not driven by direct revenue source. A comprehensive, long-term public finance plan makes sense, but planners are not generally equipped for this challenge and other disciplines seem not to be interested.

What is a Sources and Uses of Cash schedule?

A Sources and Uses of Cash schedule gives a summary of where capital will come from (the "Sources") and what the capital will be spent on (the "Uses") in a corporate finance transaction. When computing their total amounts, the sources and uses accounts should equal each other.

The sources and uses schedule becomes very important and useful when creating a model for situations like Recapitalizations, Restructurings, and Mergers & Acquisitions and commonly used in investment banking.

The guide will teach you all you need to know about a Sources and Uses Schedule and how to build one yourself... an important step in becoming a world-class financial analyst.

Link: https://corporatefinanceinstitute.com/resources/knowledge/modeling/sources-and-uses-of-cash/

Teaching.

The primary way planners practice their trade is by teaching. Planners learn and learn by teaching; and planners teach. They teach public officials, residents, economic developers and allied professionals. Planners teach community development principles and techniques, sustainability theory and practice and urban design at the micro and macro scales. But, at the end of the day, what do we know, and what have we been taught, about the arts and science of teaching?

There are many ways to begin to learn about the skill of teaching; the Carnegie Mellon University approach is a starter. The following is longer than usually reported in *CharacterTowns.org*, but the content is rich and the subject is important. The CMU approach below reads "students, classrooms and instructional materials", but planner should read the principles as "citizens and stakeholders; plans and regulations; workshops and hearings".

Carnegie Mellon University

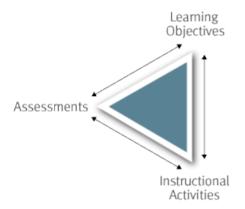
Eberly Center

Teaching Excellence & Educational Innovation

Teaching Principles

"Teaching is a complex, multifaceted activity, often requiring us as instructors to juggle multiple tasks and goals simultaneously and flexibly. The following small but powerful set of principles can make teaching both more effective and more efficient, by helping us create the conditions that support student learning and minimize the need for revising materials, content, and policies. While implementing these principles requires a commitment in time and effort, it often saves time and energy later on.

"Effective teaching involves acquiring relevant knowledge about students and using that knowledge to inform our course design and classroom teaching.



"When we teach, we do not just teach the content, we teach students the content. A variety of student characteristics can affect learning. For example, students' cultural and generational backgrounds influence how they see the world; disciplinary backgrounds lead students to approach problems in different ways; and students' prior knowledge (both accurate and inaccurate aspects) shapes new learning. Although we cannot adequately measure all of these characteristics, gathering the most relevant information as early as possible in course planning and continuing to do so during the semester can (a) inform course design (e.g., decisions about objectives, pacing, examples, format), (b) help explain student difficulties (e.g., identification of common misconceptions), and (c) guide instructional adaptations (e.g., recognition of the need for additional practice).

"Effective teaching involves aligning the three major components of instruction: learning objectives, assessments, and instructional activities. Taking the time to do this upfront saves time in the end and leads to a better course. Teaching is more effective and student learning is enhanced when (a) we, as instructors, articulate a clear set of learning objectives (i.e., the knowledge and skills that we expect students to demonstrate by the end of a course); (b) the instructional activities (e.g., case studies, labs, discussions, readings) support these learning objectives by providing goal-oriented practice; and (c) the assessments (e.g., tests, papers, problem sets, performances) provide opportunities for students to demonstrate and practice the knowledge and skills articulated in the objectives, and for instructors to offer targeted feedback that can guide further learning.

"Effective teaching involves articulating explicit expectations regarding learning objectives and policies.

There is amazing variation in what is expected of students across American classrooms and even within a given discipline. For example, what constitutes evidence may differ greatly across courses; what is permissible collaboration in one course could be considered cheating in another. As a result, students' expectations may not match ours. Thus, being clear about our expectations and communicating them explicitly helps students learn more and perform better. Articulating our learning objectives (i.e., the knowledge and skills that we expect students to demonstrate by the end of a course) gives students a clear target to aim for and enables them to monitor their progress along the way. Similarly, being explicit about course policies (e.g., on class participation, laptop use, and late assignment) in the syllabus and in class allows us to resolve differences early and tends to reduce conflicts and tensions that may arise. Altogether, being explicit leads to a more productive learning environment for all students. <u>More information on how clear learning objectives support students' learning.</u> (pdf)

"Effective teaching involves prioritizing the knowledge and skills we choose to focus on.

Coverage is the enemy: Don't try to do too much in a single course. Too many topics work against student learning, so it is necessary for us to make decisions – sometimes difficult ones – about what we will and will not include in a course. This involves (a) recognizing the parameters of the course (e.g., class size, students' backgrounds and experiences, course position in the curriculum sequence, number of course units), (b) setting our priorities for student learning, and (c) determining a set of objectives that can be reasonably accomplished.

"Effective teaching involves recognizing and overcoming our expert blind spots.

We are not our students! As experts, we tend to access and apply knowledge automatically and unconsciously (e.g., make connections, draw on relevant bodies of knowledge, and choose appropriate strategies) and so we often skip or combine critical steps when we teach. Students, on the other hand, don't yet have sufficient background and experience to make these leaps and can become confused, draw incorrect conclusions, or fail to develop important skills. They need instructors to break tasks into component steps, explain connections explicitly, and model processes in detail. Though it is difficult for experts to do this, we need to identify and explicitly communicate to students the knowledge and skills we take for granted, so that students can see expert thinking in action and practice applying it themselves.

"Effective teaching involves adopting appropriate teaching roles to support our learning goals.

Even though students are ultimately responsible for their own learning, the roles we assume as instructors are critical in guiding students' thinking and behavior. We can take on a variety of roles in our teaching (e.g., synthesizer, moderator, challenger, commentator). These roles should be chosen in service of the learning objectives and in support of the instructional activities. For example, if the objective is for students to be able to analyze arguments from a case or written text, the most productive instructor role might be to frame, guide and moderate a discussion. If the objective is to help students learn to defend their positions or creative choices as they present their work, our role might be to challenge them to explain their decisions and consider alternative perspectives. Such roles may be constant or variable across the semester depending on the learning objectives.

"Effective teaching involves progressively refining our courses based on reflection and feedback.

Teaching requires adapting. We need to continually reflect on our teaching and be ready to make changes when appropriate (e.g., something is not working, we want to try something new, the student population has changed, or there are emerging issues in our fields). Knowing what and how to change requires us to examine relevant information on our own teaching effectiveness. Much of this information already exists (e.g., student work, previous semesters' course evaluations, dynamics of class participation), or we may need to seek additional feedback with help from the university teaching center (e.g., interpreting early course evaluations, conducting focus groups, designing pre- and posttests). Based on such data, we might modify the learning objectives, content, structure, or format of a course, or otherwise adjust our teaching. Small, purposeful changes driven by feedback and our priorities are most likely to be manageable and effective."

Link: <u>https://www.cmu.edu/teaching/principles/teaching.html</u>