



Rethinking Architecture Education

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Focus on the Future

The future of the architectural profession calls for us to rethink how we educate our students and accredit our schools.

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With the National Architectural Accrediting Board (NAAB) preparing for its tri-annual validation conference in October 2003, the collateral organizations are developing position papers focusing on aspects of architectural education that concern them. The Association of Collegiate Schools of Architecture, for example, is concentrating on nomenclature to define the difference between B. Arch., M. Arch., and D. Arch. degrees. But nomenclature is not the key issue. Few prospective clients ask an architect for his or her degree. Rather they focus on what the architect brings to the table, and this is where architectural education falls short. The future of the architectural profession calls for us to rethink how we educate our students and accredit our schools.

NAAB Conditions
for Accreditation

Condition 1:
Program Response to the NAAB
Perspectives

Condition 2:
Program Self-assessment

Condition 3:
Public Information

Condition 4:
Social Equity

Condition 5:
Human Resources

Condition 6:
Human Resource Development

Today's clients want more from architects. They want creative designers with souls in the air, but minds firmly rooted in the practical. And architects want more of themselves. They want to be leaders, strategic thinkers and masters of the design and construction process. Students also want more from their education—a studio culture that frees them to explore their essence inside and outside the architecture world. And academics themselves are experimenting with new ways of delivering information that take into account changing building complexities and university economics. Yet architects are learning the science and art of their craft much the same way today as they did years ago. The question today then is what should architects be taught if they are to be productive, successful contributors to the future? Here are some matters that might be considered.

When I was serving as public member of the National Architectural Accrediting Board, many of us were struggling with three basic questions:

- **Curriculum**—What skills and knowledge should a future architect learn in school?
- **Criteria**—How should a school's program be evaluated?
- **Process**—How should the evaluation proceed?

How the profession answers these questions will be the basis of its future.

But no questions can be answered in a vacuum. It is essential to take into account the realities the profession is facing, including:

- The changing needs of society of architecture and of architects
- Shifting social, political, and economic demands that result
- The economic realities of the Academy and the people who pay for the education it delivers, and
- The economic realities of the profession and clients.

Grounding the answers within these realities will discipline the ultimate answers, but for the time being, let us be freewheeling—thinking with imagination and foresight.

Curriculum: What should a future architect be expected to learn in school?

By first asking what clients demand of their architects—whether they are owners, developers, politicians or Walt Disney and George Lucas—we will have a better chance at arriving at a solution that has beauty, social resonance, and lasting utility.¹

¹By client, I have in mind what architects refer to as "the good client." No profession that hopes to survive should base its education otherwise.

What then are their demands? Good clients want to be filled with beauty and delight. But they also want their projects—be they buildings or cinematic special effects—brought in on time and on budget. They want to understand what is being designed and know that it will solve the personal or business problem that brought them to the architect in the first place. They want the design solution to last and be lasting, a result of careful thought of the demands of the present and those of the future. They want society to be happy or at least accepting of the result. They have wanted this for thousands of years. No one has any reason to believe that clients of the future will want less.

Condition 7:
Physical Resources

Condition 8:
Information Resources

Condition 9:
Financial Resources

Condition 10:
Administrative Structure

Condition 11:
Professional Degrees and
Curriculum

Condition 12:
Student Performance Criteria

But if the Academy helps develop architects who meet all the demands of the building client, will the Academy have accomplished all its goals and objectives? No, because society has a critical interest in having broadly educated citizens (not just qualified architects) as its members. Gearing education to only the goals of the building client can all too readily reduce education to training.

Moreover, students enter the Academy in order to build for themselves the intellectual foundation, the platform they need to base their future actions. Students have a critical interest in being broadly educated, as their future may not rest exclusively in architectural practice. So we must also ask, beyond

what the client wants of the graduate, what does the student want from higher education?

At the minimum, in order to be successful in society today under any definition of success, a student needs to graduate comfortably possessing these competencies.

To be an educated person, one needs:

Thinking Competencies, requiring knowledge of science and the liberal arts, research, ethics, critical thinking, i.e., the ability to analyze, synthesize, integrate and apply, and appreciate how to learn
People Competencies, requiring grounding in negotiation, persuasion/sales, listening, diversity appreciation, collaboration, teaming, and conflict management

To be a practitioner of architecture, one needs:

Design Competencies, requiring grounding in history, theory, design, structures, life safety, life cycle/eco-economics, aesthetics, and problem solving
Making Competencies, requiring grounding in technology, drawing, construction, codes, and standards, legal aspects of architecture, and time management

To be influential in society, one needs:

Business Competencies, requiring grounding in building/project economics, project management, accounting principles, firm management, and entrepreneurship

Though arguably superior to the criteria they replaced, the 1998 criteria are needlessly redundant.

Public Competencies, requiring grounding in advocacy, government, community building, outreach, leadership, and oral and written communication.

If these competencies are correct, aligning the needs of the client and the needs of the student is no small task. But is that task doable? Yes, if,

1. The NAAB's current 37 criteria are rethought in order to respond to these competencies, and
2. The resulting criteria are performance based and not prescriptive.

The result will be criteria that facilitate schools formulating dynamic curricula that produce the program diversity and vibrancy so valued by the profession and so necessary for its future.

Criteria: Against what should a school's program be measured?

Currently NAAB requires schools to show that their program meets 12 conditions and its curriculum evidences student accomplishment in 37 areas. (While all the conditions need to be re-evaluated, it is the 12th condition—student performance criteria—that is addressed herein.) As written though, NAAB's criteria are not stand-alone, mutually exclusive criteria.

Indeed, they contain many internal overlaps, meaning that "failure" in one creates "failure" in another.²

The 1998 criteria have other inherent weaknesses. Though arguably superior to the criteria they replaced, the 1998 criteria are needlessly redundant³. A rethinking of the criteria is called for, not only to have criteria that

² Criterion 12.22, for example, requires a student to be "able to assess, select, and integrate structural systems, life-safety systems, building envelope systems, and building service systems into building design." Each of these specified "systems" has its own "understanding" criterion, to wit:

12.17 Structural Systems ("Understanding the principles of structural behavior...")

12.18 Environmental Systems ("Understanding of the basic principles that inform the design of environmental systems...")

12.19 Life-Safety Systems (Understanding of the basic principles that inform the design and selection of life-safety systems...")

12.20 Building Envelope Systems ("Understanding of the basic principles of building envelope systems")

12.21 Building Service Systems ("Understanding of the basic principles that inform the design of building service systems...").

Thus, if students do not "understand" any one of the five systems, they must by necessity lack the ability to integrate that system with all of the others required. One weakness here, one weakness there and soon a school is being greatly penalized for one omission. Worse, if a school interprets the criteria as "one criterion-one class," that school will seek to have six classes authorized, even though teaching their students how to integrate building systems may be better taught in fewer courses, or more.

comprehensively and singularly make pedagogic and practice sense; but also to permit both schools the latitude they need to teach creatively and efficiently, allowing students to amass knowledge effectively.

A rethinking of the criteria is equally important because the current criteria leave the client almost totally out of the process. Some academics argue it is hard enough to teach the student architecture without considering the client. Moreover, clients come and go, but buildings and “place” can last forever. Shouldn’t society, and not the client, be the fulcrum of the architect’s aesthetic expertise in the same way that society is the pivot for the architect’s commitment to health, safety and welfare—not the client’s need for a responsive and affordable building?

Clients come and go, but buildings and “place” can last forever.

Most everyone knows that architects serve both their particular clients and society, and that their goals are not always compatible. Even the average Joe (or Judy) who gazes up at a new public library and sees that the architect allowed the engineer to just plunk down the plumbing and heating vents in the ridge of the pitched roof line can guess that either the owner wouldn’t pay for or the architect couldn’t design an affordable, aes-

thetic solution. For that architect, absent the ability to negotiate otherwise, client cost-control needs overruled society’s interests (and Joe’s and Judy’s) for durable aesthetics. A trained focus on both client and society could have resulted in a better design with arguably marginal increase in cost. Therein lies the challenge of architecture and architect education.

NAAB’s 37 criteria fall resolutely on the side of society. There is but one mention of the client. (See 2.30 Program Preparation, buried within it a requirement to be able to assess client and user needs—and no more.) Most of the criteria focus instead on buildings and buildings’ requirements. When people needs are explicitly referenced, it is the requirement for the architect to be “leader from project inception, design, and design development to contract administration.” [See Architects’ Leadership (now “Administrative”) Roles.] The result is students are permitted, if not encouraged, to think of the client as the enemy standing between the architect and safe buildings, the architect and aesthetically pleasing buildings, and the architect and his or her appropriate role in society and on the building site. From that stance, it is an easy slide into architect as victim of forces beyond

³The criteria still have four on precedent and traditions (12.9 Use of Precedents, 12.10 Western Traditions, 12.11 Non-western Traditions, 12.12 National and Regional Traditions) whereas one criterion might fit the bill. The criteria also include two on legal aspects of architecture (12.23 Legal Responsibilities and 12.31 The Legal Context of Architecture Practice) and both of these arguably overlap with 12.13 Environmental Conservation, 12.14 Accessibility, 12.24 Building Code Compliance, 12.33 Contracts and Documentation, and 12.36 The Context of Architecture.

control. This unwittingly NAAB-induced group think-speak is in no one's interest—not the client's, not society's, nor the architect's. Putting the client more visibly into the academic setting is a necessary first step to architects having real influence outside their atelier.

Criterion development is hard, and there is no perfect list. If we could, however, agree on the goals of the criteria, that task is much easier. At minimum, an acceptable set of criterion must:

- Derive from the needs of the client—whether the client is the sponsor or user of a project or building, or society at large
- Have each criterion clearly focused, defined and mutually exclusive from the other criteria
- Have a pedagogically acceptable basis, and
- Must address the attributes of an educated person, a sound practitioner and an influential professional

Through disciplining criteria, we can facilitate strategic, and thus more economical, teaching.

These then are the criteria that will work. Unlike the current criteria, they focus on competency areas, not specific competencies, thus allowing each school the flexibility and diversity in teaching approach that the last

independent review of architectural education—the Boyer Report, *Building Community*—found so admirable. Each school would be evaluated on 10 criteria for its graduates to demonstrate:

1. Have a solid general education
2. Communicate graphically—by computer, by hand, and by model as well as verbally and in writing
3. Integrate knowledge of design theory and history in the process of design
4. Know their social, ethical, and practice responsibilities
5. Demonstrate critical thinking about client, user, and community problem that the project is intended to resolve
6. Collaborate and negotiate in the design process, knowing when and how to lead, and when and how to follow
7. Create building designs with well-integrated building systems
8. Create building designs that integrate fundamentals of life safety and environmentally sustainable design
9. Create constructible building designs that demonstrate serious consideration of cost control and building economics
10. Integrate the disparate needs and wants of the client, community, society, and self, whether in the global or national urban, rural, or suburban setting, to be able to create—in time—buildings, places, and projects of lasting wonder and usefulness

Unlike the current criteria, they focus on competency areas, not specific competencies

I must emphasize the priority given to having a solid general education. Research shows that consultant trustworthiness is a function of how well the consultant demonstrates to the *client* competence, candor, and concern about client needs and issues. That means to prove trustworthy, architects need to be competent, candid, and concerned about more than just the client's building. That "more" requires a strong liberal arts education. The more broadly architects are educated, the greater context they can bring to the client's needs. With that, the more value they can deliver, and, let us not be too theoretical, the bigger fee they can merit.⁴

Process: How should "competency" be determined?

Currently, the way accreditation works, the NAAB visiting team ensconces itself in the school's designated team room for much of the visit. There they are surrounded by a minimum of four walls of exhibits—more if the school uses additional display systems—and shelves upon shelves of syllabi, books, and professor and student produced paper.

Somewhere within the midst of all of this stuff is an NAAB-imposed chart that allows the school to map each of its courses along a matrix of the 37 curricula. In theory, if all of the criteria are ticked off and all of the

exhibits, syllabi, books, paper and other stuff confirm the veracity of the ticked-off matrix, a school is accredited. The question is though, why should any school be accredited through the game of "Where's Waldo," particularly as there are better ways to confirm that minimal standards of education are being met?

There are some in the accreditation world who are re-framing this issue for other professions, which offer much to learn from. Instead of absorbing the school's responsibility for defining and evaluating quality education and compliance with minimum standards, they are proposing that that responsibility be placed squarely with the school. In other words, as a first step in identifying and addressing needed changes, the Academy has to be self-critical. It has to be able to demonstrate to itself and to others that it knows, and how it knows, that its students are meeting the criteria. In this way the Academy will be in a better position to recognize where it is succeeding, or failing, and take corrective steps, as necessary during each of the many days between external evaluations.

Of all the changes being proposed, it is likely this new route is the most radical. NAAB can start this transference by requiring schools to

⁵The reader may be thinking that these 10 criteria could also be used by the AIA and NCARB in their continuing education efforts. That would make sense: students, interns, and practitioners are trying to master the same subject. What would differ would be the depth of knowledge, skill and competency exacted of the participant with interns striving for journeyman achievement and practitioners hoping someday to achieve mastery.

Students deserve more than that, and schools can do better.

demonstrate how they are meeting their strategic plan. This proposal builds on that initiative by extending it to the criteria. NAAB would in effect be saying to the 112 accredited schools of architecture, “Show how you know your students meet these criteria. And as a part of that, you have to define what the words—like ‘solid general education’—mean to you.” This is true academic freedom, but it is also the real challenge.

A first-year coordinator once explained to me that, though he could not tell from the exhibits what another first-year section teacher was trying to achieve, he just knew that all first-year students were achieving overall first-year goals because no second-year teachers were complaining about their performance. Students deserve more than that, and schools can do better. This new approach to performance evaluation would help each school better focus its energy on achieving shared goals. And when that school reached the finish line, everyone in that school—teacher and student alike—would know it and know they deserved to be there. NAAB’s task would then focus on the correctness of the school’s appraisal, knowing full well that under the new process any school that has complied with the spirit and the letter of the new criteria is delivering an education worthy of the profession.

About the author:

Ava J. Abramowitz, Esq., Hon. AIA, has served as deputy general counsel of The American Institute of Architects and is author of *Architect’s Essentials of Contract Negotiation*, published by John Wiley & Sons, Inc., 2002. She served as a strategic planning facilitator of the National Council on Architecture Registration Boards, as a public member of the National Architectural Accrediting Board, as guest lecturer at schools and firms across the country, as a counselor at Victor O. Schinnerer & Company, Inc., and, most recently, as a client. Abramowitz is a founding fellow of the American College of Construction Lawyers and a member of the ABA’s Forum on the Construction Industry, having just completed a three-year term on its governing committee. She serves as an arbitrator for the American Arbitration Association and also as a mediator in private practice. Abramowitz is an Honorary Member of The American Institute of Architects.

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