

# **BEcoming an Architect: Sustaining Our Future**

*A White Paper by*

*The Interns' Forum of*

*The Ontario Association of Architects*

*April 7, 2014*



**Ontario Association of Architects**

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## 1. EXECUTIVE SUMMARY

The Interns' Forum (TIF) was established in 2012 by the Ontario Association of Architects (OAA) Council and charged with conducting a review and evaluation of the process to become an architect with a particular focus on the Internship period. In exploring ways to make the journey from student to intern to architect a more holistic and meaningful experience, the committee reviewed the needs and mandates of four constituencies: Interns, Practices, The Profession, and The Schools, as well as past and current trends in the profession.

TIF is comprised of OAA Councillors, practising architects and intern architects of various ages/experience levels/firm sizes/geographic locations. In addition, senior representatives from the Schools of Architecture at Toronto, Ryerson, and Waterloo Universities joined the working group and acted as resources to the committee as have the OAA Executive Director and the OAA Administrator Licence.

The TIF findings began with an examination of the current situation in architecture from the point of view of the four constituencies noted above. It was broadly recognized by TIF that each of these four groups have in common the Student/Intern who must navigate the path to licensure under their auspices and without whom each would be unsustainable. The journey from the beginning of school through to licensed architect is lengthy and challenging, requiring an ongoing burden of proof and accomplishment with multiple hurdles to overcome. It was recognized that a significant number of participants experience inadequate support or empowerment during the process. The 2011 OAA intern survey results showed dissatisfaction and disillusionment among a significant proportion of those that responded. While the recently completed 2013 survey by the Canadian Architectural Licensing Authorities (CALA) shows some improvement, the results still point to room for further change.

The curriculum for the Canadian accredited Schools of Architecture is mandated by the *'Conditions and Terms for Accreditation'* (CACB 2012) which is administered by the Canadian Architectural Certification Board (CACB). The schools strive to meet the requirements of the Guide to Student Performance Criteria (CACB 2012) while still imparting the wonder as well as the far-reaching responsibility of architecture, as well as imparting a unique educational perspective sensitive to their particular history, region, and special talents. There is an expectation that Schools will 'turn out' graduates who are able to hit the ground running in a work situation, yet are aware of and sensitive to powerful forces shaping Practice such as history, sustainability, technology, digitization, and globalization; this is an onerous responsibility.

Nationally, the Internship in Architecture Program (IAP) attempts to codify the breadth of minimum experience seen as a prerequisite for receiving a licence. It operates within a regulatory framework whose base assumption is that every licensee may immediately choose to offer services to a public whose interests must be protected. Thus, the Profession's mandates are shaped by its legal responsibility to regulate architects in the public interest coupled with the need to support current and future generations of architects to ensure a competent, sustainable and viable profession.

For its own part, Practice is caught between the conflicting demands of protecting financial viability while building a future and ensuring a continuity of succession through mentoring and nurturing 'up and coming' architects pre and post licensure.

This paper then looks forward to a future which empowers practices and the student/intern, strengthens communication and partnerships among the four critical constituencies in the continuum of architectural practice, and provides more accountability in how practices and interns interact. We propose implementation of measures which begin by providing support throughout the journey of architectural education to the (hopefully still) young and newly minted architect. Effecting support and accountability for Interns and Practice requires the Profession to maintain a continuity of outreach, information, feedback, and advocacy throughout the experience and to provide incentives and opportunities for Practice to fulfill its nurturing educational role.

Our closing thoughts look further afield to examine and question some of the premises that frame the issue at hand. These include an exploration of alternatives to the current framework for education and experience, challenging the profession to collectively embrace the opportunities inherent in the changes to the practice of architecture, in order to enhance the role and influence of architects in the building design and construction industry.

## 2. INTRODUCTION

TIF was established in 2012 by OAA Council. Its primary mandate as stated in its Terms of Reference is “to strengthen the path to the profession from school through to licensure.” (OAA, 2012). Recent changes to the Internship in Architecture Program (IAP) requirements have aimed to streamline the intern’s path to licensure, including the reduction of experience hours from 5600 to 3720 with a requirement for only two occupancy types. These changes also limit the experience time frame and locale (CALA, 2012a). CACB has introduced automatic certification of educational qualifications for graduates of accredited schools of architecture thus eliminating an administrative hurdle for those embarking on the internship path. The introduction of the Canadian architectural licensing exam (ExAC) has also been seen by many as a significant improvement over the Architectural Registration Exam (ARE) offered in the United States. In Ontario, administrative changes such as the introduction of the Financial Hardship and Leave policies with regard to payment of fees have also been appreciated by interns.

Changes have also been made over the past several years to the schools’ curricula with the aim of enhancing the currency and relevance of architectural education within the limitations of the Conditions and Procedures for Accreditation of Schools of Architecture. Examples are the heightened focus on entrepreneurship seen in the programmes of some schools and an increased emphasis on collaborative skills aided by technological advances in the areas of building information modelling (BIM). Such changes should continue to evolve and be encouraged.

While this paper is intended to address the OAA’s position and recommendations in response to CACB’s call for papers in support of the planned 2014 Validation Conference, the scope of our review includes a broader look at some of the premises which frame the current effort. Our recommendations include suggested further enhancements of an administrative nature that can be implemented at the Association level and that might be seen as an example or option for the other regulators. As well, we have made policy suggestions which may require implementation at a national level.

### 3. BACKGROUND

#### 3.1 TIF Terms of Reference

In 2012 the Ontario Association of Architects established The Interns' Forum (TIF). As previously stated, TIF was established as a committee to examine the situation of Intern Architects in Ontario, review the established process for licensure, and make recommendations for improvement. The experiences of students in the schools of architecture was also to be included as part of the overall process.

The mandate of TIF was in part to:

- Work with CALA/CACB through the Executive Director and Council to ensure that appropriate architectural training/education is being offered by the Schools.
- Liaise with employers/firms in the Province to elicit their support in the internship process.
- Consider if and how the coordination of ExAC study groups (within restrictions that apply as the administrator of the exam) might be facilitated by the OAA and or available study material for the ExAC in conjunction with CALA.
- Establish an annual presentation to the individual Schools of architecture which focuses on the regulation of the profession of architecture in Ontario, the process to licensure and the role of the OAA.
- Facilitate the integration of the committee's activities and initiatives into the Societies as a way of networking between Intern Architects and the profession.
- Facilitate a survey of students, interns, supervising architects, mentors and practices which will look at whether students are satisfied with the subject matter they are learning and if they feel they are properly prepared to participate in the building design and construction process; whether supervising architects feel that interns have the knowledge necessary to constructively participate in the building design and construction process, etc.
- Consider ways to integrate students into the OAA earlier in the process.
- Given the decision of CALA to hold a validation conference in 2014 the committee was also tasked with producing a report to CALA on issues to be addressed.

In 2013 CALA initiated and implemented a national survey of the profession and interns in respect of key questions impacting the process of architectural education and training. The results of this survey are referenced and form part of the background to this report.

#### 3.2 A Historical Perspective

The role of the architect in society underwent a transformation during the Renaissance, when the advent of the age of reason and the implications of "man" displacing "god" as the center of the universe were the genesis for upheavals in the way architecture was commissioned, used, and valued. The architect as the master craftsman was challenged by the shift towards science which ultimately led to more formalization and classroom training and less on the job apprenticeship. The industrial revolution and astounding discoveries of the 18<sup>th</sup> and 19<sup>th</sup> centuries coupled with the advent of steel construction, enabled the construction of new and amazing buildings with increased emphasis on the acquisition of technical knowledge and the new universities at which such knowledge could be sought.

By the 1960's, the horrors of two world wars were (for most) far enough behind us and the level of relative prosperity pervasive enough to create an opportunity for questioning and challenging the status quo. The student riots of 1968 in Europe and the influences of the flower power decade were felt most deeply in the academic world, with architecture schools joining the rebellion worldwide. While educational awareness expanded to include issues such as social, political, and experimental approaches, the traditional emphasis on preparing students for practice suffered, leading to a deepening schism between the worlds of academia and practice. (Polo, 2013)

*“In Europe, architecture students and faculty were among the more radical participants in the campus activism of 1968. Many schools of architecture worldwide, including those in Canada, diverged from their role as providers of training grounds for the profession to offer a wide range of experimental curricula that sometimes placed them in direct opposition to conventional practice. As a result, a rift developed between the profession and the schools, with practitioners complaining that graduates were leaving the schools without the skills required in an office. In some cases, the practical and technical aspects of architectural education were pushed aside by a growing interest in social, political and theoretical issues.” (Polo, 2013)*

In Canada, the profession reacted by forming the CACB as a national organization in 1976. CACB's mandate was to evaluate and assess the architectural education of each prospective architect prior to allowing them entry into the process leading to licensure. By 1992, the CACB began to accredit programs, whose graduates were able to proceed directly to the internship phase. (Polo, 2013)

At this point in time, although alternatives such as the RAIC Syllabus Program exist, the demand is high and competition intense for a spot in an accredited school of architecture. In the past decade or so, schools have made substantive changes to their programs in order to remain viable avenues to licensure. (Polo, 2013)

*“The schools are faced with the task of establishing a balance between preparing students for professional practice and providing an academic education that finds favour with the university administrations that fund the programs. While professional training emphasizes the practical skills and knowledge required to be productive in a working environment, high academic standards require research and experimentation in all aspects of architectural theory, technology and design. The pressure on schools to meet these complex demands has been exacerbated by dramatic changes within the profession. Faced with the reality of cyclical recession, graduates can no longer count on careers in traditional architectural practice, and schools have recognized their obligation to prepare students for this eventuality. Several have introduced substantial design-build components to their curricula; and many now provide students with, among other areas of expertise, computer skills that can lead to a variety of careers parallel to or even quite distinct from architecture.” (Polo, 2013)*

Now, in the early decades of the 21<sup>st</sup> century it can arguably be said that the technological transformations and ecological catastrophes our planet is going through have coincided with increasing collaboration between schools and the profession as the two sides seem to be working towards a common approach to unity to face these challenges.

### **3.3 The Internship in Architecture Program**

The national Internship in Architecture Program (IAP) came into effect January 1, 1998 and it was amended January 1, 2012. Prior to 1998, each provincial association had its own registration process and the treatment of architectural experience varied across the country.

The IAP was established by the CALA (previously known as the Committee of Canadian Architectural Councils – CCAC) with the goal of maintaining a program of architectural licensing and registration that is both meaningful and effective. It was also intended to be a catalyst for improving the profession, by increasing effective communication between architects and prospective members of the profession. It was designed so that Interns must remain in the IAP while experience is being gained and recorded and while examinations are being written to derive maximum benefit from the programme. (IAP Manual, 2013)

The IAP establishes a uniform national standard (The Canadian Architectural Experience Standard – CALA) which defines and documents areas of architectural practice in which professional knowledge and skill must be gained in a structured, supervised and mentored environment. The standard provides a uniform system for documentation and assessment of intern activities; guidance and feedback to interns and involves members of the profession in the development and training of future members.

One of the innovations of the IAP is the introduction of the external mentor – an architect other than the employer who can offer independent advice and counsel to the intern on the range and quality of the experience being provided to them.

While the notion of standardization and definition of both the mentoring and supervising architect roles in the IAP are important and desirable, the experience of interns in the program seems to suggest that there is a very uneven result with significant numbers expressing the view that neither role is adequately supported by the profession in practice.

The challenges of day to day practice and to some degree the conflicting interests of employers and interns are difficult to balance in practice. Perhaps the inevitable emphasis on accountability placed on the intern needs to be balanced by clearer performance requirements for the professionals that assist in the programme and similar accountability.

After 16 years of operation it is suggested that the IAP as a whole needs to be evaluated and perhaps retooled so that it is more responsive to the needs of both interns and practitioners as have been identified by recent surveys of the participants. Such retooling will also give the program an opportunity to take into consideration the modern reality of architectural practice and the impacts of the dramatic changes that have and are occurring.



## 4. THE CURRENT SITUATION

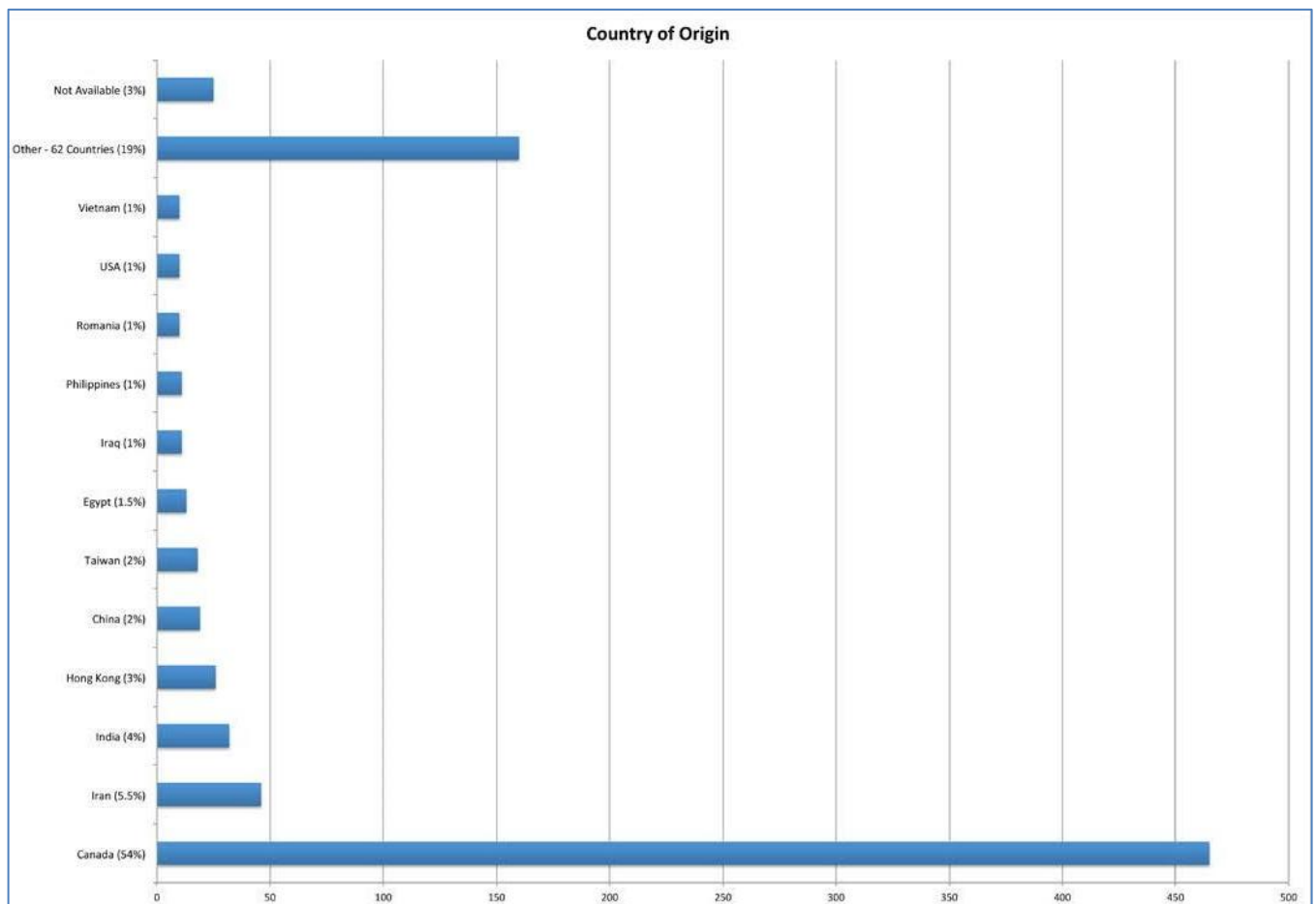
### 4.1 INTERNS

#### 4.1.1 What the Data Indicates

Two recent surveys, the 2011 *Ontario Association of Architects Intern Survey* and CALA's 2013 *National Survey of Newly Licensed Architects, Interns and Recent Architectural Graduates*, provide insight into the demographics and perspectives of current interns and recently licensed architects.

The 2011 *Ontario Association of Architects Intern Survey* was conducted in Fall 2011 and the results were presented to the Council of the Ontario Association of Architects in February of 2012. The intern survey received 366 responses, which is 28% of the approximately 1310 interns registered with the OAA at that time.

The bar graph noted below is a quick summary of country of origin for OAA Interns.



There are a number of findings pertinent to this discussion:

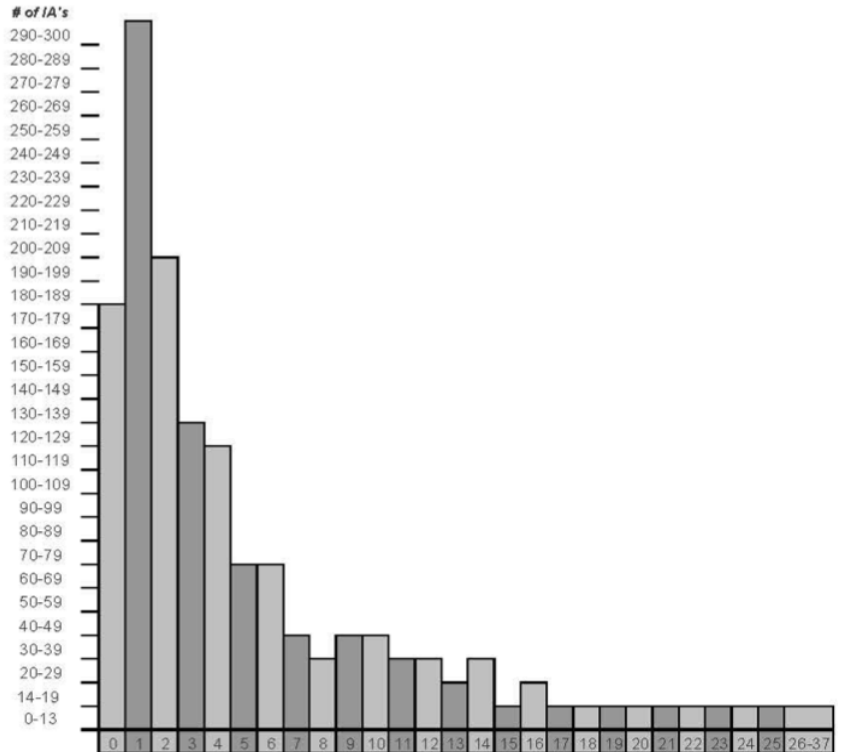
- A significant number of respondents to the survey indicated that they do not agree with any of the three statements below:
  - *“The Intern Architect Program is appropriate to the training needs of an Architect”;*
  - *“I am satisfied with the mentorship component of the IAP”*
  - *“The OAA has been responsive to my needs as an Intern Architect”.*
- On average, intern architects responding to the survey had graduated nine years previously, but on average had only been registered in the IAP for three years. This is indicative of a significant gap (six years on average) between graduation and enrollment with the OAA.
- While the majority of interns received their architectural degrees from Canada, there was a significant percentage (35%) of internationally-educated respondents who received degrees from countries other than Canada or the United States.
- Respondents enrolled in the IAP for over three years identified three significant barriers to completion of the program and licensure:
  - the process takes or took too much time;
  - it was difficult to arrange work in the required categories; and
  - the respondents believe that there is no measurable benefit in becoming a licensed architect
- Between 50-60% of respondents indicated that their employer has been supportive of their efforts to obtain the necessary hours for licensure and that their contributions were valued by their employer. Less than 50% felt they had actually been given the work necessary to complete their internship. Approximately 30% felt they were fairly compensated by their employer.
- 61% of respondents had taken the admission course, 53% had written either the ARE or ExAC exam.
- The majority of respondents had work experience in commercial, residential, and assembly occupancies.
- Respondents indicated that some areas of experience were much harder than others to record the required number of hours. The most difficult areas to obtain experience were:
  - Building Cost Analysis (80hrs)
  - Bidding & Contract Negotiation (80hrs)
  - Construction Phase - site (120hrs)
  - Project Management (120hrs)
  - Office Management - site (80hrs)
- Respondents commented on what resources are lacking from the OAA. The top two groups of responses focused on educational offerings (courses, education, workshops, training) and insufficient material resources.

The **2013 National Survey of Newly Licensed Architects, Interns and Recent Architectural Graduates** was conducted in October 2013. Of the 1795 respondents, 54% were interns, 38% recently licensed architects, and 2% student association members. The largest group of respondents was between the ages of 30-39.

Noted below is a snapshot of the current status of Intern Architects in terms of their length of time in the IAP. It is noted that the number of years that an individual is enrolled in the IAP is decreasing due to changes already made to address ongoing issues.

Snap Shot of Current Status of Intern Architects as of August 15th, 2013 (Registered Licence Candidates with the Ontario Association of Architects)  
 Prepared by TIF Committee (dmp/kw- August 20-2013)

*Years as Licence Candidate	**Year Registered	***Number of Candidates Current	Percentage
0	2013	176	13.0%
1	2012	291	21.5%
2	2011	198	14.6%
3	2010	129	9.5%
4	2009	113	8.4%
5	2008	65	4.8%
6	2007	63	4.7%
7	2006	36	2.7%
8	2005	23	1.7%
9	2004	32	2.4%
10	2003	31	2.3%
11	2002	21	1.6%
12	2001	26	1.9%
13	2000	17	1.3%
14	1999	25	1.8%
15	1998	11	0.8%
16	1997	19	1.4%
17	1996	10	0.7%
18	1995	6	0.4%
19	1994	11	0.8%
20	1993	5	0.4%
21	1992	7	0.5%
22	1991	7	0.5%
23	1990	13	1.0%
24	1989	3	0.2%
25	1988	4	0.3%
26	1987	5	0.4%
27	1986	2	0.1%
28	1985	3	0.2%
29-36	1977-1984	0	0.0%
37	1976	1	0.1%
		<b>1353</b>	<b>100.0%</b>



\* Years as Licence Candidate:

\*\* Year Registered: From January 1 to December 31 of each calendar year

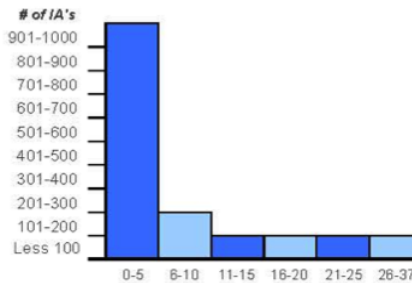
\*\*\*Number of Candidates Current: Based on OAA print out last entry August 15, 2013

Years as an OAA Licence Candidate:

Current: As of August 15th, 2013 from OAA data print out of registered IA's

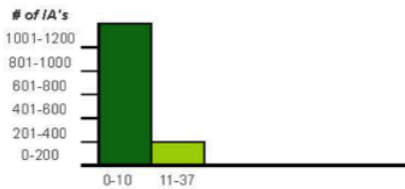
Note: OAA - current designation - Intern Architect (IA)

*Years as Licence Candidate	**Year Registered	***Number of Candidates Current	Percentage
0-5	2008-2013	972	71.8%
6-10	2003-2007	185	13.7%
11-15	1998-2002	100	7.4%
16-20	1993-1997	51	3.8%
21-25	1988-1992	34	2.5%
26-37	1976-1987	11	0.8%
		<b>1353</b>	<b>100.0%</b>



Years as an OAA Licence Candidate:

*Years as Licence Candidate	**Year Registered	***Number of Candidates Current	Percentage
0-10	2003-2013	1157	85.5%
11-37	1976-2002	196	14.5%
		<b>1353</b>	<b>100.0%</b>



Years as an OAA Licence Candidate:

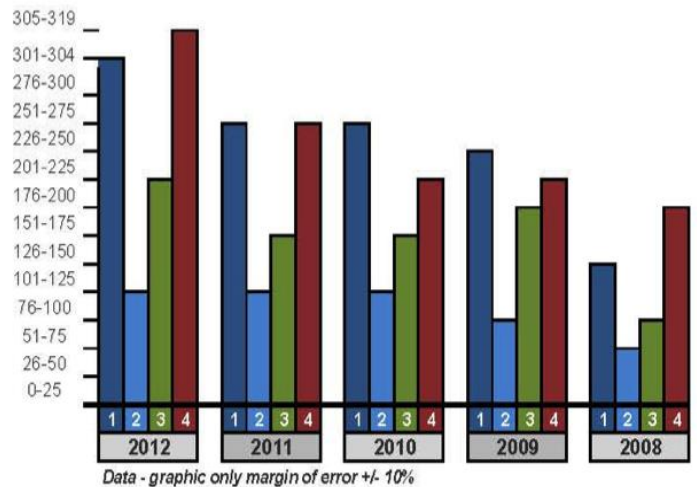
Some of the results from the 2011 survey were reiterated here, indicating that interns nationwide face similar challenges and express similar levels of dissatisfaction with the internship experience. The results also indicated some improvement in the experience of interns in comparison with the earlier sample.

Some notable results:

- Although 38% of respondents were licensed architects, only 28% of respondents indicated that they had a seal or stamp issued by a Provincial or Territorial architectural regulator
- 61% of respondents had been working in architecture (including time worked prior to graduation) for more than 5 years.
- There was a wide variety in the firm size where respondents worked, with the most common firm size being 20-49 employees.
- 70% of respondents indicated that previous work experience was either effective or very effective in helping the transition from school to architectural employment.
- 70% of respondents worked in more than one architectural firm prior to licensure.
- 49% of respondents graduated within the last 5 years, 29% of respondents more than 10 years ago. The median number of years since graduation was 6, an improvement over the median of 9 years in the 2011 survey results.
- 17% of respondents graduated from a university outside of Canada or the United States.
- Only 32% of respondents indicated that their education was either effective or very effective at preparing them for entry into the profession. Respondents indicated that their education prepared them best in the area of schematic design, with the following areas leaving them the most unprepared:
  - Bidding & Contract Negotiation
  - Building Cost Analysis
  - Construction Phase - office and site
  - Project Management
- Respondents were evenly divided when asked whether these educational deficiencies would be better covered by schools or the IAP.
- Respondents enrolled as interns for more than three years indicated as the top 4 reasons that they were not yet licensed:
  - “Process takes/took too much time”;
  - “Difficult to arrange for work in required categories”; and a tie between
  - “Family leave, maternity leave, parental leave or other personal leave”; and
  - “I think there is no measurable benefit in becoming licensed”.
- Respondents indicated that the top five areas for improvement in the IAP were:
  - Mentorship
  - Length
  - Logging Hours
  - Exams
  - Employer Support
- 44% of respondents felt the information provided by their regulator regarding the IAP was effective.

Thus, while the latter survey shows an improvement in a few significant areas, it reiterates a number of valid intern concerns, and provides a road map of issues to work on for further improvement. Of particular interest is the fact that the top four areas of challenge in logging experience hours remained the same.

Year	1 - Total: New OAA licences	2- New OAA Licences Non-IA	3 - New OAA licences from IA's	4- New IA's
2012	304	101	203	319
2011	242	97	145	250
2010	235	90	145	204
2009	228	65	163	205
2008	119	46	73	161
	1128	399	729	1139

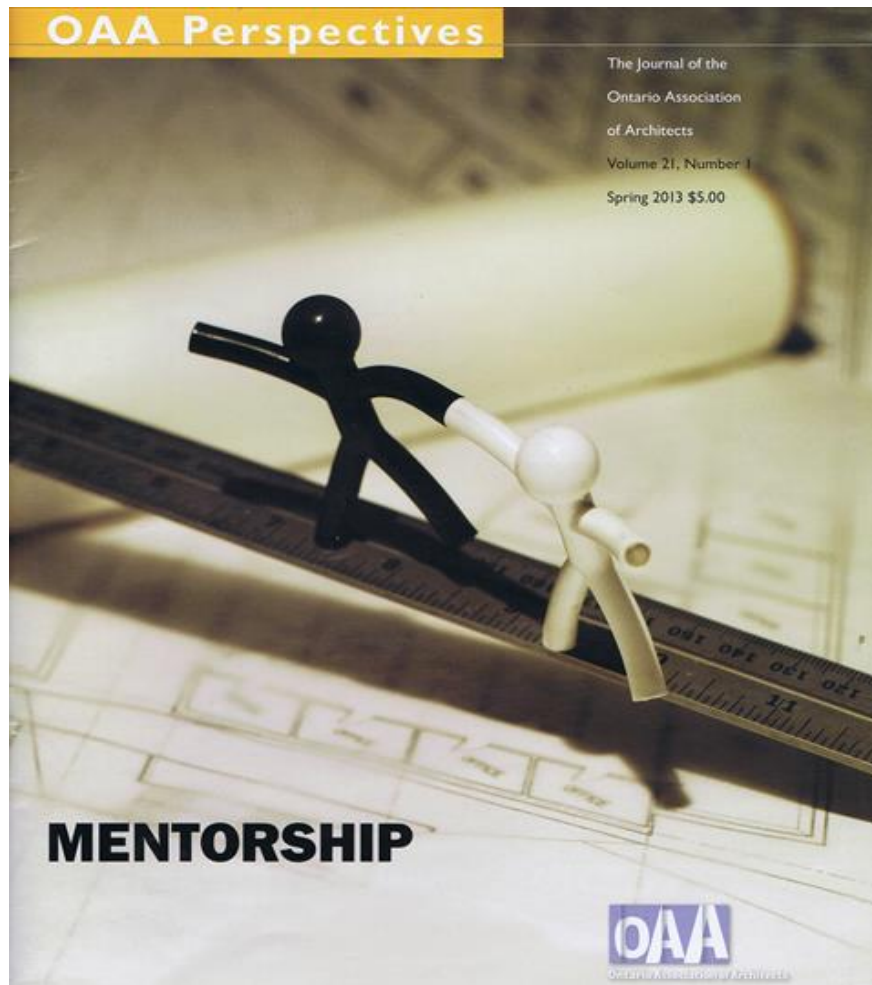


#### 4.1.2 Attitudes

As evidenced by the intern survey results, comments made during sessions at the 2013 OAA Admission Course, feedback from students at the TIF discussion session, and many anecdotal and informal instances, there is a significant perception on behalf of interns that the Profession can do better at addressing their needs and concerns. While there are considerable efforts being made (the Validation Conference and TIF being prime examples, as are the changes to the IAP to facilitate its completion), and there is a high degree of goodwill and positive intentions in many quarters, it is important to understand and acknowledge the interns' situation. There is a feeling among many interns that they inhabit the periphery of the profession, and they strive for greater respect, inclusion, and support.

There are numerous levels on which the Profession may examine the messages being sent to - and about - interns. These include instances such as, interns pay OAA dues, yet they are feel they are not considered members, are not represented on Council, and have few opportunities to be heard and influence policy. Seemingly insignificant things such as a magazine cover depicting the intern in peril and need of saving, or the grade-school type attendance control and sign-in requirements at the Admission Course send unintended negative signals. The very designation 'Intern Architect' is seen by some interns to intimate non-whole, or apprentice, and the current practice of not allowing the use of the designation architect upon graduation influences the perception of value.

One of the messages imparted to interns is that they must be honourable and of good character in order to become architects. Thus, interns perceive a double standard when they deal with employers who do not meet their ethical obligations, or mentors who do not make time for them, and find that they have nowhere to turn for help or enforcement. Steps such as ensuring that interns are provided with advocacy, have a forum to deal with unfair employment practices, and liaison to communicate with will go a long way towards bringing about a greater degree of satisfaction among interns.



Furthermore, in reviewing the survey results we note that some interns believe there is no measurable benefit in becoming a licensed architect. Some of the reasons for interns' negative perception of the value of licensure may include working in larger firms where licensure may not be beneficial - or needed - for their careers, interns working in related fields to architecture where licensure may not be required, and the absence of a financial incentive great enough to cover the challenges of meeting the IAP criteria and passing the requisite exams. While the majority of interns find their way through the internship process in due course and within a reasonable period of time, we find this aspect of the results troubling nonetheless and believe efforts should be made to address these perceptions.

Of course, one of the more obvious benefits of licensure sometimes overlooked while contemplating more subjective considerations is the impact on compensation. The 2010 SDA Salary Survey conducted by Research Dimensions indicated that nationally the average and median salary expectations for licensed architects were over 50% higher than for interns. At the high end of the range in Ontario the differential was in the order of 225%. (Research Dimensions, 2010)

#### **4.1.3 Challenges**

While the 2013 Intern Survey results show some improvement on the issue of interns' dissatisfaction with the IAP relative to the 2011 Survey, the continuing concerns are significant enough to warrant a need for further changes. The improvements may be in part a result of the changes that were undertaken in the past 7-8 years to reduce some of the barriers to licensure. Among these changes were a reduction in the number of hours required in the IAP for candidates 3720 for versus 5600 automatic CACB certification



for graduates, the new more relevant ExAC examination versus the ARE, and the introduction of both Financial Hardship and Leave policies related to the payment of fees.

While these recent changes to IAP criteria have addressed one of the key issues identified as barriers by both the 2011 and 2013 intern survey (respondents indicated the process takes too much time), other issues such as the challenges of arranging work in the required categories and negative perceptions about the benefits of becoming a licensed architect remain as barriers. Some of these barriers result in instances where interns may need to office-hop, or change jobs, in order to cover category requirements (occupancy requirements have now been reduced to 2). Combined with inadequate employer support and mentorship, the result leaves some interns feeling as if they are left to fend for themselves.

In the 2013 CALA Survey of interns and newly licensed architects, respondents were asked to indicate the IAP's top three areas for improvement; the issue of inadequate mentorship was identified as the top level of concern. Both types of mentorship - the employer-employee relationship, and the IAP mentor – intern relationship were found to be lacking and in need of improvement. The present system does not hold practising architects accountable for the experience their interns accumulate. Additionally, some interns do not have the proper mentorship and guidance to assist them through the licensure process. One reality is that some interns working in large firms with a narrow or very specific role, may be limited in their exposure to the variety of experience required by the IAP.

#### **4.1.4 Students' Perspective**

To more completely survey the constituencies of the process of architectural education and licensure, TIF held an informal session with a number of students from Ryerson and Waterloo Universities. The objectives were to assess the level of awareness and understanding of the OAA among students, their knowledge about the process of licensure, and their expectations of the OAA. To this end a questionnaire was prepared, and the contents discussed as a group. A total of 8 students were present, representing undergraduates, graduate students, and students in the process of completing co-op components of their program.

While there was a general level of awareness of the OAA, the consensus was that much about the OAA, the process and requirements for licensure remained a mystery. There was a collective interest in more outreach, information, and interaction with the OAA, and suggestions about the OAA improving its branding and web and social media presence. Ideas such as a brochure targeted towards students, regular presence at schools to answer questions and provide information, and students being assigned an intern as a mentor to help them navigate the early stages of their career were enthusiastically received. The general feeling was that both the OAA and students would benefit from early outreach and communication.

The fact that the value of becoming an architect was already a question mark for these students, and that they were aware of the existence of what has been perceived as turf wars with designers who hold a Building Code Designation Number (BCIN) who can provide certain services to the public highlights the need for introspection and inquiry on this crucial issue. The idea of allowing students (particularly in professional degree programs) to begin logging hours was one that bears further exploration as the value of work experience prior to graduation is indisputable.

## 4.2 Practice

For Practice, it is recognized that one of the prime objectives is survival in a competitive marketplace. As a result, there can be a significant gap between the school and practice that can make intern integration a challenge. Results from CALA's 2013 Practice Survey (covered in the section to follow) indicate gaps in the education of an intern. Tellingly, practitioners believe that the architectural degree program should be covering content areas where Interns are inadequately prepared for the profession.

Practitioners are looking for graduates entering the workforce who are able to produce; are more entrepreneurial with a better understanding of the business of practice, construction, and development; and who are risk managers. Interns with a greater appreciation of regulatory accountability, who have better technical skill sets relative to production, are at an advantage in the workplace.

Conversely, the ongoing upheaval in practice related to digital technologies and the deployment of BIM places an increased importance on the contribution of interns. The fact that most interns enter the market place with the most current digital skills can be a double-edged sword. On the one hand, such highly valued skills make them more sought after and able to contribute in a reverse-mentoring situation, with the intern teaching more seasoned members of the profession and the firm relying on the younger members to keep up to date. On the other hand, interns with these skills may be limited to specific roles, thus limiting their ability to gain the requisite experience hours required to become a fully licensed architect.

The competitive nature of the marketplace and the on-going demands practitioners are faced with daily often make it difficult for practitioners to be attentive to the needs of interns. With the practitioner pulled in multiple directions and the absence of any structure and accountability, the intern's mentorship and experience in the workplace can easily be neglected. The lack of support and communication for practices as regards mentorship is ironic, as this is the component of practice most vital for propagation of the profession and its robust future.

### 4.2.1 Analysis of Practice Survey

The fundamental goal of this survey was to gather information and data to support the Canadian Architectural Certification Board (CACB) in hosting a Validation Conference in 2014. This conference will be attended by Canadian Architectural Regulators and Schools of Architecture. The questions were directed toward gauging employer's opinion regarding the preparedness of interns and recent graduates, and identifying trends in practice.

Three hundred and seventy practices participated in this survey. In terms of the form of practice, the majority of respondents (45%) indicated they are sole proprietors, with corporations comprising 44%. Among the practices surveyed, 41% worked from home while the other 59% had office space outside of the home. Almost one third of the practices indicated they are run solely by the Architect with no employees. While all firms reported diversity in the types of work undertaken 61% indicated commercial as their primary source of work, followed by single family residential at 44% and multi-family residential at 42% (this was a multiple answer question). Thus, the range and diversity of work that an intern is exposed to is often limited to the two occupancies mentioned above, with the resultant effect of limiting the opportunity for gaining experience in multiple occupancies and a greater need for changing offices.

The majority of practices surveyed felt that the intern or graduate is neither well nor poorly prepared, and that the degree of preparedness for the workforce is no different than it was five years ago. The practices that ranked interns as being inadequately prepared also believed that architectural schools should bear the responsibility for improving the situation.

The top five skills sought by practices were:

- Construction documents 28%,
- Design development 27%,
- Schematic design at 26%,



- Code research at 17%.
- Specifications and material research at 13%

The top five strengths that employers found among interns were:

- Schematic design 72%
- Design development 69%
- Professional practice 64%
- Site & Environmental analysis 58%
- Programming 57%

The key area of discrepancy between skills possessed versus those sought is in the area of construction documents. Two other areas of discrepancy include code research and construction phase activities in the office and on site. These discrepancies highlight the importance and value of pre-graduation work experience.

The practices surveyed were also asked to evaluate their satisfaction with the local regulating authority. The level of satisfaction with all regulators across the country ranged from 43% for some to 57% for the OAA. These statistics indicate that there is general dissatisfaction among practices who responded with their regulating authorities.

Practices were also surveyed regarding their level of satisfaction of interns or graduates based on the school attended. The University of Waterloo and “Other Schools” not within Canada both scored the highest at 60%, followed by McGill University at 58%. As the University of Waterloo is a co-op based program whose graduates must complete (approximately 24 months) of work experience, we can confirm the correlation between pre-graduate work experience and employer satisfaction.

The survey further indicates practices believe that professional knowledge, technical instruction, and work experience needs to be provided by the Profession and Schools in order to better prepare graduates for the working environment.

#### **4.2.2 Practice - The Current Situation**

Canada is a large country with a small population and a small architectural profession spread out over vast distances. As a result it is difficult to build significant practices to serve domestic requirements that respond to the current demands of the built form industry, as well as compete with large international practices with more resources, that are taking up residence in Canada; still less compete in the international arena themselves.

The profession is an increasingly complex animal incorporating the need for many diverse skills within the framework of practice. While this level of complexity is less of an issue in the small boutique practices that are forecast to develop, it is a more serious matter for larger competing organizations. As a result consolidation seems likely to continue. [Although, it is suggested that, partly because of our geography, there is still likely a role for medium sized practices in smaller centres - provided that they can absorb the technological changes].

Since the profession is governed by Provincial/Territorial mandates it has traditionally led to issues with inter-provincial trade. While this may be changing (CALA and CACB as well as inter-provincial acceptance of experience requirements are examples of this) there are still current matters surrounding the development of national practices. This hinders our competitive edge.

However none of this alleviates the fundamental situation where, because of the relatively large and few “client units” – peculiar to most practices, there are serious swings in work load. It is a characteristic of the profession that tends to increasingly favour large multi-disciplinary organizations. Moreover all this does nothing to assist the integration of interns into the profession.

It is not clear what determines how many architects Canada can presently absorb. Yet Ontario and Canada as a whole have over the last number of years been opening new schools of architecture, not to mention bringing in new immigrants who are able to obtain licences. There is a question about whether this influx can be accommodated from the point of view of the profession, and whether this policy will lead to increasing frustration on the part of interns as well as current stakeholders?

Canada as a young country is still developing an architectural culture, yet it is competing on the international stage with more developed cultures. The profession must work hard and effectively to be taken seriously in this arena. Will it take a leadership role in the built form industry, or will it gradually find itself playing only support roles?

### **4.3 The Profession**

The profession of architecture has experienced profound change in the last few decades. Pressures from technological developments, shifting social attitudes toward professional services, and market conditions continue to be exerted on the profession while it struggles to balance the forces of transition and the conflicts between them.

Most enter a chosen profession such as architecture with a true passion and the zeal to reach their full potential. However, economic forces often take precedence, since unlike other professions such as medicine, professional ideals and financial interests invariably run counter to the business interests of the clientele. Added to this are the challenges of managing a practice in a profession driven by economic cycles, and a society that has become increasingly – some would say excessively - litigious, and thus risk averse.

Architecture is one of the professions given the privilege of self-regulation by government. This means that each member - licensed architects and architectural practices – is responsible for and must play a role in the regulation as well as the sustainability and viability of the profession. Thus, we come full circle in the discussion of how to meet this responsibility while maintaining economic viability.

In Canada, the governance and regulation of the profession is provided for under the Provincial *Architects Act* by means of regulatory bodies such as the OAA. The regulators are expected to fulfill their principal mandate of ensuring the public's interest by establishing and enforcing requirements for entry into the profession and maintaining competency, while also dealing with a membership that has voiced its dissatisfaction around a number of issues such as architectural fees, advocacy for the profession, readiness of Interns, risk and liability. Since Profession and Practice are often synonymous, the challenges being faced by Practice will in many instances reflect those facing the Profession.

Needless to say, the OAA has extensively studied the satisfaction level of members as well as interns over the past twenty years. This has been accomplished through a number of media including surveys, roundtable discussions, white papers and member forums. In response, a number of changes have been made which include measures to make the IAP a more streamlined and relevant process (these were discussed in 4.1.3).

To illustrate the balancing act that a regulator must perform - a recent survey has indicated that interns with a better understanding of the profession earlier in the education/internship process were in general more satisfied with the process. This indicates a need for more and earlier support and communication from the regulator. Furthermore, practices have provided feedback indicating areas where additional education is needed. It is then up to the regulator to convey these findings to the national forum for discussion and decision - are such educational needs best met by the Schools of Architecture (resulting in changes to the accreditation and student performance criteria) or by the profession itself? This is an ongoing challenge as the current curriculum for the Schools is already very intensive, while the ability of individual practitioners to educate interns is limited by time and the economics of running a successful practice.

#### 4.4 The Schools

Our Schools of Architecture face a multi-faceted challenge. They are charged with meeting the requirements of The Guide to Student Performance Criteria (CACB 2012) while attempting to impart the wonder of architecture as well as its far-reaching implications and responsibilities. And perhaps, they will even manage to do all of this while passing on the school's unique educational perspective, shaped by their history, region, culture, and special talents.

Thus, the quest to strike the right balance between fostering creativity and exploration while training for professional competency is an ongoing dilemma. Ryerson Professor Marco Polo (2013) summarizes the situation well:

*"The schools are faced with the task of establishing a balance between preparing students for professional practice and providing an academic education that finds favour with the university administrations that fund the programs. While professional training emphasizes the practical skills and knowledge required to be productive in a working environment, high academic standards require research and experimentation in all aspects of architectural theory, technology and design. The pressure on schools to meet these complex demands has been exacerbated by dramatic changes within the profession. Faced with the reality of cyclical recession, graduates can no longer count on careers in traditional architectural practice, and schools have recognized their obligation to prepare students for the eventuality."* (Polo, 2010).

The general approach and understanding in past decades has been that interns can gain most of the skills and experience necessary for practice on the job, with the schools focusing on providing the philosophical underpinnings and a general approach to materials, structure, and services along with drawing and presentation skills. In this century, there has been growing concern expressed by practitioners regarding future interns graduating without the skills required for the practice (Polo, 2010).

Thus, the approach of schools of architecture has transformed in response to Practice and Profession's demands for a more complete skill set and efforts to standardize architectural education. Currently, the curriculum taught at architectural schools in Canada is based on the Conditions and Term for Accreditation (C&PA - CACB 2012) and more specifically the Guide to Student Performance Criteria (SPC - CACB 2012) which are both established and administered by CACB and approved by the regulators. While all accredited schools of architecture follow these standards, the way in which the SPC is met varies from one school to another, reflecting the individual school's core philosophy and theoretical bent.

However, as outlined above in 4.2.1, CALA's 2013 practice survey indicated on-going and widespread dissatisfaction regarding interns' (2-3 years post-grad) level of preparedness. Furthermore, the respondents felt that the onus for addressing the shortcomings should rest with schools. Simultaneously, CALA's intern survey of the same year indicates that many students enter university with little or no awareness of issues relating to practice, and that once graduated, 48% of interns (CALA, 2013) were unsure whether or not the education was effective in preparing them for entering into the profession. One of the comments expressed by an intern in the CALA intern survey (2013) was "Prior work experiences obtained as a student was insufficient. Architecture school, although intellectually rewarding, did not provide the necessary skills or technical knowledge that most architectural firms irrespective of size were seeking."

The conviction that on-the-job experience is a valuable component of an architect's education is confirmed by statistics (practice survey - CALA, 2013) showing that the recent graduates from Waterloo had the highest employer satisfaction levels at (75%). They were followed by UBC (59%) and Ryerson (53%) - which has long been known for the strength of their technical program.

While this data indicates that there is room for additional improvement, it is also apparent that schools are responding to the issues generated by Practice and the Profession, and are in the process of undergoing a transformation in approach – of which the data may take some time to play catch up. We note a greater balancing example would be the schools that accommodate a work experience component into their program i.e. co-op programs. This work experience exposes the students to office environment and practice before they graduate.

Recommendations:

1. Based on what has been outlined in section 4.3 regarding changes in the profession, and the issues raised in this section, it is apparent that CALA has further ground to cover in terms of first developing and then re-evaluating student performance criteria.
2. It is not only the role of schools to raise awareness and understanding of the profession among their students, this must be a mission shared by the Profession and by Practice.
3. Schools can increase their involvement and support in encouraging and facilitating job finding and placement.
4. Professional practice courses need to be more widely included in schools curricula, and schools should actively engage Practice and the Profession on an on-going basis in the teaching of such courses. This recommendation received strong student support at the student roundtable held in 2013.
5. Provide seminars on the practicing and hiring process to better inform and prepare students for the hiring as well as work-performance process.
6. Establish a liaison position responsible for coordinating internally with students and externally with the Profession and Practice to better identify and meet needs and concerns.

## 5. LOOKING FORWARD

### 5.1 Focusing on the Student / Intern

The link between the formulation of intent to pursue architecture and the shining moment at which the title “Architect” is finally attained is the student/intern. Through years of school, late nights spent racing against time and fatigue, going all out on a project to leave a review feeling gutted and without hope, through the trials and rejection of finding employment, the struggle for that employment to carry weight and meaning towards eligibility for licensure, through the juggling act of studying for and passing another series of exams while meeting work and family responsibilities, it is the aspiration and perseverance of the individual that gives academia its *raison d’être* and continues to provide fresh blood to nourish and maintain the profession.

Thus, it is ironic that many students and interns feel disenfranchised. More often than not, the student and intern spend many long years trying ‘to become’, with little affirmation of their value as a vital commodity to the educational system and later to the sustenance of practice and the profession. A key challenge of this undertaking is to re-imagine a partnership in which the process of attainment includes empowerment. Finally to state the obvious, there needs to be clearly defined value in education and licensure in order to ensure a continuous replenishment of the numbers.

It is important for the OAA to recognize the needs of intern architects, and effective communication is ensured throughout the process from the moment of acceptance into the internship in architecture program, until licensure. The committee has identified areas and opportunities for possible improvement:

- The OAA Admission Course is one of the first instances in which interns deal directly with OAA representatives. This course can be used as a venue to welcome interns and provide them with support and contacts that they will need in their long journey to licensure. As currently administered, the regulated nature, relevance to ExAC, and the value of the course as a clearinghouse for contacts are diminished by the extreme measures taken to ensure attendance throughout all of each session.
- The designation ‘Intern Architect’ could be re-examined. The designation was originally ‘Graduate Associate’, until it was changed to ‘Intern Architect’ eighteen years ago. A change in the designation could change the whole view of the individual and how they are perceived. A second possibility is for an earlier acquisition of the designation architect.
- IAP criteria can be updated to more closely reflect current trends in practice.
- There could be greater flexibility over ExAC examination, with the possibility of more than one exam date. Perhaps the requirements for the ExAC can be a range of hours rather than a fixed number of hours.
- Better two-way communication and more inclusive attitude from the OAA. There could be more responsive communication with present intern architects. In general, there should be earlier communication with students regarding the IAP.
- Provide a clear, structured framework for the OAA to support interns.
- Include a peer-elected intern on Council.
- Create more web-based communications to reach individuals, including tweets, and a Facebook page.

## 5.2 Promoting Partnerships – The Profession

Harmonizing the roles academia and profession play in the development of an architect is critical for the long-term health of the profession. Thus, it follows that partnership in the process is key to achieving success. As the governing bodies of our profession, the regulators carry the onus for communicating and strengthening the ties with the Schools in order to ensure the robust survival and viability of practice. Enacting a paradigm shift of valorizing the architect-to-be from the moment of intention would be a solid foundation on which to build.

Therefore, we propose that the regulators develop a greater presence in schools in order to impart an appreciation of professional practice and the role of the regulators at an earlier, more formative moment in the student's career. Earlier outreach efforts such as providing OAA information package upon acceptance into a school, initiating and maintaining a conversation with schools, asking student organizations to meetings of the regulator would all contribute to an earlier integration of education and practice. Beginning the dialogue around the expectations and possibilities of our profession could be followed by the assignment of a mentor who helps the student see the forest as well as the trees as they undertake their journey towards becoming an Architect.

On a collective level, the regulators can provide a forum for an on-going dialogue with students regarding needs and expectations. The informal meeting held by TIF last fall to explore students' awareness and understanding of the OAA, their familiarity with the process of licensure, their positions on the value of licensure, and expectations around communication from the OAA proved extremely valuable. Despite the awkward timing of the meeting which coincided with imminent final project deadlines, eight students from Ryerson and Waterloo Universities attended and indicated great interest in an on-going conversation with the OAA.

The OAA can also quantify its success in sustaining the profession by developing methods for gauging recruitment to the profession and assessing the conversion rate from students to licensed professionals.

In a recent article entitled "Universities Educate, Employers Train" (2013) Wilfrid Laurier University President Dr. Max Blouw paints an elegant picture of the traditional university role in the process of educating an architect. While this position can be seen as the status quo in the past, a more nuanced thesis holds currency in our 21<sup>st</sup> Century world where education and training are intertwined as an arguably ongoing process. Rather than the static - we educate and then someone else trains, an architect's education starts on day one of university and continues until retirement.

Thus, while the education of an architect is a continuum, at some point the trainee must start working, earn a living and contribute to society. With the continuity of education as the critical factor, we are now seeing increasing interfaces between the profession and academia, with national organizations such as CALA and the CACB working with schools across the Country to refine curricula and establish its current relevance. As a matter of comparison, the UK has, over time, offered more formal arrangements between the parties where the schools are accredited (as in Canada), but play a more integrated role in the licensing procedures as set out in the Architects Registration Board Student Handbook (Architects Registration Board).

Some possible initiatives:

1. The Survey on interns sets out the varying levels of knowledge that incoming students have about the profession (CALA 2013a). It is suggested that the OAA provide an introductory session through the schools to explain the nature of the profession and its commitments.
2. In principle, a more formal process should be established in co-operation with the schools regarding preparation for the internship process. This would include instruction/information sessions being provided within schools. This would be similar to the arrangements in the UK (Architects Registration Board Student Handbook). Such a change would provide a very valuable demonstration of the continuum at work. As we know, the successive survey results indicate students and interns feel there is a disconnect between education and practice.



3. Students in schools should automatically be provided with student membership in the OAA and in their local Society, and should be encouraged to take part in the activities of both groups, particularly in the events arranged by the Societies (De Angelis, W. 2013/2014). Currently, a Student Associate status is available from the OAA, with no required fee.
4. Upon graduation, schools should be responsible for submitting the students' credentials to CACB for accreditation and subsequently enroll students in the OAA as interns.
5. Current Situation - Increase intern fees to incentivize licensure within 5 years. Proposal - Allow newly licensed Architects to pay the intern fee (less than 5 years in IAP) until the end of the 5 year period even if they have reached licensure before the end of the 5 year period. This will reward interns who move to licensure more quickly.
6. Current Situation - Interns are required to gain experience in two occupancy types. Proposal - Replace occupancy requirement with the requirement for involvement in a range of activities required to bring a project to fruition i.e. the full scope of services on a project.
7. Current Situation - Interns can only gain experience hours from employer. Proposal - Make the acquisition of hours more flexible through options such as workshops from another practitioner or pooling interns among practitioners. Participating practitioners in turn can receive continuing education points.
8. Current Situation - ExAC takes place only once a year in the fall. Proposal - adjust threshold for writing to range vs number of hours, consider offering exam more than once/year

### **5.3 Supporting Interns - Sustainability in Practice**

"Innovation comes from the bottom up. This is where students change the profession....It starts in the schools and the profession catches up." (Kieran, S.2014)

As practitioners, we have both professional and moral obligations to students and interns which are increasingly difficult to fulfill. While we often have a bond of sympathy for interns, we are charged professionally with upholding and to some extent enforcing experience requirements that we may find questionable, antiquated, and occasionally irrelevant to contemporary practice.

While we embrace interns as the future of our profession and our practices, we have collectively made the requirements of licensure onerous and the benefits dubious, to the point that some of the most talented opt out. Morally, we owe them the benefit of mentorship within the work environment but few architects can find time in the endless whirl of fighting fires that is contemporary practice to offer professional guidance to an intern.

The Profession also needs to acknowledge that interns often work extended hours while trying to juggle other demands including young families and this often leaves them little time or appetite for IAP activities. In general, there is a broad lack of awareness for the difficulties faced by interns in obtaining licensure and this contributes to the lack of active support and mentorship among practitioners.

The internship process imposes demands that have unintended and disruptive consequences for both the interns and the practices in which they are employed. These include the range of activities and project occupancy types required by the IAP Manual's Appendix B – which can be difficult to obtain within a single practice and counter-productive to the mutual benefits of long-term employment and specialization. Another instance is the recent restriction which limits logging of hours to buildings physically located within the province – which also ignores the growing globalization of architecture. Thus, the job mobility often necessary for interns to assemble the required variety of project experience is disruptive for

employers and represents a loss of investment in training and nurturing. For interns, changing their place of employment can be professionally damaging, with a loss of seniority/opportunity, personal upheaval, and the inadvertent creation of a CV that may suggest employability issues. Achieving eligibility for taking examinations can also create employment conflicts, when studying effectively becomes a second job that distracts from work efforts, especially in the case of interns with families.

Thus it is clear that practitioners today face a dilemma: how to provide a supportive situation for interns when technological currency, productivity, and effectiveness are increasingly critical to the economics of practice. In conflict with offering interns the range of experience they seek is the rapid and transformative deployment of Building Information Modeling (BIM) within the construction world. Adapting to BIM requires a significant investment in training staff in order to achieve a level of fluency and productivity. Such facility, once attained, wants to be well used but is not integral to all phases of projects and aspects of practice, and so can act to limit opportunities. So it is that internship experience requirements often conflict with what we currently need most from interns: their knowledge and facility with contemporary technologies, their enthusiasm, and their quick hands.

These are difficult and constantly evolving issues that may never be fully resolved, but can certainly be better addressed than they currently are. Improved professional support for interns is clearly needed and could take many forms including:

1. A congratulatory membership application package included with each graduate's diploma to encourage early participation in the regulatory body.
2. Create programs to promote awareness among practitioners of their important role in the Intern Architect Program and encourage broader and more positive engagement of professionals in the IAP process.
3. Provide professional incentives for practitioners to be more active in supporting internship (e.g. Continuing Education credit for activities such as providing formal mentoring in their role as Supervising Architect).
4. Consider developing a direct advocacy and support program for interns (potentially similar to the Waterloo Architecture Co-op program which visits employers and students to review their work situations).
5. Develop a practice bulletin regarding the employment of interns that would provide a model for hiring, mentoring, and working with interns. The practice bulletin might include model language for an employment agreement to be signed by both the practitioner and intern that would deal with mutual expectations related to IAP issues.
6. Consider repealing the IAP requirement that buildings must be physically located in the regulatory jurisdiction.
7. Consider allowing interns to earn hours towards licensure by mentoring students.
8. Create the possibility of pairing interns with mentors who share areas of special interest in architecture through establishing a database with short profiles of mentors.
9. Consider including a peer-elected intern in an observer role in the governance of the regulator.



## 5.4 Future of the Profession

“Today, students and young professionals are fundamental drivers of change in the architectural profession. Critiques of the architectural discipline have periodically pointed to a disconnect between academia and professional practice. The perceived formal whimsy of academics and the stale pragmatism of practice sit at opposite ends of the spectrum.”(Pallett, L. Douthart, K. Cunha, A. 2014)

Globalization, changing project delivery methods, the possibilities afforded by new digital tools, and the increasing influence wielded by associated professions with a hand in the construction industry are bringing about substantial change in the profession of architecture and by extension in the education and training of architects.

A number of the reports, surveys, and articles, seeking to analyze the situation at hand indicate a trend in which the future may be secure for two ends of a spectrum of architects – the name-brand global and the boutique local. At one end a few very talented – and well branded - superstars (who in fact may not be architects) may be secure because society demands the cache of their services, while at the other architects working modestly in small locally oriented practices may also be secure. However, the predictions are that the vast majority of architects will likely work in teams of consultants or employees within the framework of large corporate structures. Such organizations may include the full range of expertise needed to produce built form, and they would likely carry the risks. They may be led by contractors or architects, but may equally well be led by engineers, or other consultants. Management skills rather than design skills are likely to determine the form of this leadership.

The architect does not occupy a sacrosanct position in society. Our role is determined by common consent that is reflected in governing legislation, which over time is open to modification as society evolves. We must constantly demonstrate our ongoing value if we are to survive the changes that are at hand (Jamieson, C. 2011, Pressman, A. 2006). Both Jamieson (“The Future for Architects”), and Pressman (“Building Futures and Integrated Practice in Perspective: a New Model for the Architectural Profession”), provide some insight into the issues and talk about the fact that other people can do our “job”, or parts of it, and that they increasingly do so. While the situation is somewhat different for other professions, notably doctors, lawyers, and engineers (i.e. there is no blurring of lines with respect to services), all of these professions are under some scrutiny to demonstrate their value (other para professions can now provide some of the standard services of those traditional professions). In this regard, architects particularly have difficulty articulating the value of their knowledge and special skills, partly because some of these skills are less quantifiable than those of counterpart professions.

While Jamieson waxes nostalgic about the status of architects in Britain “In the face of a continuing erosion of traditional architectural skills to other players, the profession seems peculiarly vulnerable to a nostalgic backward glance at a bygone age in which the architect was the undisputed boss”, Pressman – whose 2006 article predated Jamieson’s by 5 years – focuses on an assessment of the scene at hand. Pressman sees forces such as Integrated Practice (IP - which concentrates on the increasing collaboration in professional services) and the increasing influence of Building Information Modeling (BIM) in the process of creating built form as changing the ground rules, while “Many academic programs in architecture still produce students who expect to spend their careers working as heroic, solitary designers”(Pressman, 2006).

Closer to home, another perspective on the factors contributing to the erosion of the architect’s role was provided by Ryerson University’s 2014 Symposium entitled “Redefining the Profession”.

The Symposium’s international panelists concurred that control of the money is where real power resides, and that in the drive to keep costs down, this power will do whatever it takes to achieve its goals. Panelist and Harvard Professor Hani Kara (who is a celebrated structural engineer) highlighted the core value of invention that design thinkers can bring to the table by stating “architecture has the power to delight the spirit.”(Bessai et al, 2014).

Ultimately, what is clear is that the term “architect” is being re-defined daily in Practice, and that the Profession and Academia will need to realign their own positions and objectives in response.

Looking further into the future, these issues may also be explored:

1. Perhaps architectural education should be conducted in ‘Faculties of Built Form’ that incorporate many disciplines under one roof, and encourage team work across disciplines.
2. Alternatively, should architectural students receive an undergraduate liberal arts education and then move into purely vocational training outside the confines and strictures of the university, with or without other disciplines? (Stevens, 2002)
3. If the distinction between the skills of an architectural student and say an engineering student become less clearly defined, should specialization in architecture as such come later in the course?
4. Should the education of architectural students place significantly more emphasis on leadership skills, financial skills and management skills?
5. Should specialization in certain types of architecture be an option offered by universities? Furthermore, should interns and ultimately licensed architects, formally specialize, as engineers do in their careers? (See Section 5.2)

## **6. SUMMARY OF RECOMMENDATIONS**

In conclusion, TIF's view is that the changes discussed and recommended above will empower practices and the student/intern, strengthen communication and partnerships among the four critical constituencies in the continuum of architectural practice, and provide more accountability in how practices and interns interact.

In summary TIF's recommendations can be organised into seven general themes relative to the various elements of the architectural educational and internship continuum. Key recommendations are highlighted in this fashion below:

### **6.1 Continue to Strengthen Curriculum Relevance to Practice**

- a. Add or improve content relative to issues such as building envelope science, professional practice, project management and business skills;
- b. Continue and strengthen curriculum relating to entrepreneurship;
- c. Teach students about other possible roles within the construction industry, e.g., contracting, project management, cost and energy management, etc.;
- d. Continue to create learning opportunities that are collaborative in nature incorporating partnerships with students and educators from other related disciplines, e.g., engineering, landscape architecture, interior design, building science, etc.;
- e. Consider the inclusion and facilitation of more co-op programs.

### **6.2 Continue to Improve Collaboration Between the Profession and Education**

- a. Involve the profession in pre-graduation programmes focused on preparing students for the internship phase;
- b. Involve the schools in providing continuing education for architects and intern architects;
- c. Expand the presence of the Regulators in the Schools through increased workshops and seminars addressing professional practice and ethics as well as other less formal interactions such as small discussion sessions or facilitated opportunities for one on one conversations;
- d. Provide automatic student membership in the respective provincial association for those enrolled in accredited architectural programmes;
- e. In order to encourage and acknowledge the value of pre-graduation work experience, reconsider allowing students to record some pre-graduation professional experience through the IAP within reasonable limits or by establishing minimum thresholds for post-graduation experience requirements after which pre-graduation experience may be counted;
- f. Consider developing a structure and framework for providing hours for employing and/or mentoring students of architecture.

### **6.3 Strengthen the Mentoring Relationship**

- a. Create programs to promote awareness among practitioners of their important role and responsibility as mentors and employers in the Intern Architect Program and encourage broader and more positive engagement of professionals in the IAP process;

- b. Consider developing a structure and framework for the employment of interns that would provide a model for hiring, mentoring and working with interns. Such a structure might include model language for an employment agreement to be signed by both the practitioner and intern that would deal with mutual expectations related to IAP issues;
- c. Consider provision of ConEd hours for those who agree to participate with interns in a structure such as contemplated by 3b);
- d. Develop a means for interns to provide general and constructive feedback on the quality of mentoring they receive;
- e. Recognize practices that create positive mentoring cultures through the provision of awards or designations tied to evaluation and participation in the more structured relationships contemplated in 3b).

#### **6.4 Streamline and Incentivise the Internship Process**

- a. Reward new licensees in Ontario who accelerate the path to licensure by keeping fees at the intern rate for the full five-year time (i.e. less than 5 years);
- b. Improve, communicate and promote the value of the Ontario Admissions Course as one of several tools for preparing for licensure, and highlight that interns have found it useful to participate in the course prior to sitting the CExAC;
- c. Incorporate continuing education opportunities focused on meeting the needs of interns who experience difficulty logging hours in certain categories into the OAA Continuing Education Programme;
- d. Continue to develop and implement appropriate flexibility in the administration of the IAP in Ontario to address the challenges that interns face;
- e. Ensure that the general communication efforts of the Regulators include as a key message the valorisation of architects and architecture as a career.

#### **6.5 Support Interns and Include them in the Activities of the Regulator**

- a. Allocate staff and financial resources to Intern liaison and advocacy;
- b. Foster and require intern participation on relevant committees, working groups and task forces of the regulator;
- c. Improve communication with interns using all available tools, particularly electronic and social media;
- d. Establish an “Intern Advocacy Committee” within each Regulatory body with the mandate of strengthening communication with interns, between interns and practices, and advising the regulators on intern needs and concerns;
- e. Look for ways to provide interns with a voice in the governance of the profession at the regulatory level, e.g. a peer elected observer role or create a standing interns committee with clear and empowered liaison with the regulator’s governing bodies.

## **6.6 Improve Relevance of IAP Experience Requirements**

- a. Restructure experience requirements so that the focus is more heavily on the broad range of activities of an architect throughout the project lifecycle and further minimize or remove the requirement for experience in multiple building types;
- b. Consider acknowledging the growing trends towards globalization by allowing some logging of hours spent working on projects outside Ontario;
- c. Ensure that experience requirements establish a more holistic culture and approach by including requirements for interns to actively participate in project based collaborative activities within multi-disciplinary team structures;
- d. Strengthen experience requirements and provide more flexible means and options to achieve them in areas where the erosion of professional scope appears to be an issue and other areas of important core skills, e.g., building envelope science, energy and cost management, construction contract administration, engineering coordination, project management and business skills, etc.;
- e. Develop and implement a workshop model for acquiring experience outside the place of employment.

## **6.7 Other Thoughts**

- a. Consider finding an alternative designation for the 'not yet licensed architect' that is more empowering than "intern". Some Interns find the connotation of an employment placement, usually without compensation, to be disrespectful;
- b. To support the notion that the obligation to continue educational and professional growth does not stop at licensure, foster (non-restrictive) recognition of areas of expertise and specialisation through:
  - i. Collaboration with the schools in the development of post-professional programmes leading to additional qualifications or specialisation designation
  - ii. Develop a means to certify and recognize specialisation and areas of expertise acquired through experience and continuing education.

## 7. IN CLOSING

A characteristic of architectural education is that its components tend to reside in distinct and separate containers: students in the schools, interns within the jurisdiction of the Regulators, and ultimately continued learning as an architect within practice. Moreover the schools themselves often stand alone in the university context isolated from the many other disciplines who are their collaborators in the world of professional practice.

Despite the evolution of an increasingly collaborative environment in the design and construction industries, integration between these realms within architectural education is limited. As a result, the path to licensure seems to be increasingly at odds with the community that provides built form. This lack of integration may be detrimental to the long-term health of the profession and what it can offer to society in the 21<sup>st</sup> Century. Christine McWebb (Director of Academic Programmes at the University of Waterloo's Stratford Campus) recently noted that the current separation of disciplines is a leftover from the Industrial Age, leading to knowledge silos with a resultant lack of intersection which does not prepare students well for the 21st Century (Eichler 2014).

Our architectural schools and internships are the foundation for the future of the profession. Presently there is sufficient concern on the part of the student and intern bodies, as well as the practitioners—as reflected in the recent surveys, to give pause as to whether we are proceeding on the right path.

We suggest for instance that it may be worth discussing an approach wherein architectural schools and students form a closer physical and academic relationship with the other disciplines that contribute to the creation of built form, as well as taking up the opportunity to introduce some parts of the IAP into the school programmes. This may result in a more holistic approach to architectural education.

Canada is a young country and is still developing an architectural culture. The profession has to work hard and effectively to be taken seriously in our community. We believe passionately that we provide more than a support role in the built form process; that we offer quality to an environment largely driven by quantity. If we wish to play the leadership role that our educational policy suggests, this precept has to be understood from ground zero – the first day of architecture school.

## BEcoming an Architect: Sustaining Our Future

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