# CIDA Site Visit: Shifting Toward an Alternative Interior Design Program Evaluation Method

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Submit Date: 2022-02-12 22:00:20 | Revise Date:2022-04-13 16:14:19 | Accept Date: 2022-05-13 14:02:43

DOI:10.21608/jdsaa.2022.121424.1160

### **KEYWORDS:**

Interior Design, Council for Interior Design Accreditation, Design knowledge, Design skills

#### **ABSTRACT:**

The purpose of this research is to evaluate an alternative method for Interior Design program accreditation process, showing the advantages and disadvantages of the new, tested, method for evaluating interior design program outcomes. A qualitative research approach was implemented in this research. The findings illustrated that the evaluation method eliminated several challenges, such as human prejudice, site visit time constrains, and overseas travel issues. Ten (N=10) reviewers were selected, using snow-ball sampling technique, to evaluate students' projects. Results from the study shows the alternative evaluation methodology eliminated several issues, such as Site visit time constrains, travel expenses, overseas travel issues, limited number of reviewers, and Human prejudice. In the meantime, the alternative method provides advantages such as expansion of CIDA accreditation, providing services during lockdowns. This methodology will enable expansion of CIDA accreditation to overseas institutions without any cost implications.

#### 1- Introduction

In a disruptive world, the interior design profession has been evolving and changing. The advancement of technology and the addition to the body of knowledge in interior design have been changing the requirements for the design projects and influenced the development of architectural schools where an increased emphasis was put on high-tech solutions (Attia, 2019). To match these changes, interior design professions started looking for specific competences in entry level designers in order for these designers to cope with and flourish in the profession as more focus was given to computer-aided design and virtual reality applications (Attia, 2019).

In interior design education, meeting profession-

al competency sought by design employers by entry-level interior designers is crucial. Many scholars (Baker & Sondhi, 1989; Hernecheck, Rettig, & Sherman, 1983; Myers, 1982) have asserted that design competencies expected from emerging interior designers have been changing overtime. This stream of research gained more momentum in the past two decades due to the rapid technological advancements in the interior design field. For instance, a survey over the past five years of about 350 design firms in the United States have consistently identified personality/ attitude, portfolio, and prior work completion of an internship as the top three most important factors for entry-level designers in the workplace (Hart Research Associates, 2015). Thus, exposing interior

emerging designers is fundamental for job hiring. This, in return, influenced the accreditation bodies to change their standards in order to meet the requirements of the profession. In general, seeking accreditation is a voluntary decision taken by the educational institution to improve and recognize the quality of its academic standards and educational programs (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2021), and is considered as one of the main indicators for measuring the quality of academic programs (Masri & Arnaouty, 2015). Accreditation became one of the most popular processes for external quality assurance (Stensaker, 2011) and the role of these accreditation bodies has expanded over the past years to the extent that they now define the important skill sets that should be possessed by a competent architect entering the profession and help design higher education curricula to match the needs of the profession (Orr, 2015). Moreover, the process of accreditation impacts the level of enrolments, academic reputation, research grants and awards, and the quality of teaching (Kumar et al., 2020). Hence, competency standards were

established by the accreditation bodies to increase

competition, remove geographical barriers, and pro-

tect the public by ensuring professional standards are

design students with knowledge and skills sought by

#### 1-1 Accreditation Programs

met (Orr, 2015).

There are a number of reputable accreditation bodies around the world, the most popular of which are: The Council for Interior Design Accreditation (CIDA), The National Association of Schools of Art and Design (NASAD), the Royal Institute of British Architects (RIBA), The National Architectural Accrediting Board (NAAB), and the International Union of Architects (UIA). CIDA is a non-profit organization in North America that aims to set standards for accredited interior design programs. CIDA aims to bridge the gap between interior design practice and interior design education by preparing proficient entry-level designers to enter the national market. When CIDA reviewers visit schools to review an interior design program that is seeking accreditation, students' projects must be presented in order to show evidence of compliance for design skill and knowledge with CIDA standards. In general, the accreditation process and decision for the interior design programs is based on a site visit by a team of three reviewers from CIDA. During their visit, the team reviews the students' design projects, conducts interviews with faculty and students, and works together to evaluate the program according to CIDA Standards. After concluding the visit, the team writes a report documenting their findings and decision; known as the visiting team report. NASAD is an accreditation commissioner that sets standards for accrediting both undergraduate and graduate institutions, universities and schools engaged in artistic, scholarly, educational, and other art/design-related endeavors in the U.S. and has over three hundred art and design accredited institutional members (NASAD, n.d.). Hence, institutions and universities seeking accreditation by NASAD must follow certain standards and guidelines outlined by the organization.

RIBA is a historic organization in the United Kingdom that provided qualification tests for practitioners since the nineteenth century. In 1924, RIBA established visiting boards to evaluate different educational programs and is expanding its services internationally to adopt programs structure capabilities (Attia, 2019). Thus, RIBA provides the basis for a curriculum design that offers students with the necessary skills needed to be competent in the professional market (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2021).

NAAB is considered as one of the oldest accreditation agencies for architecture degree programs in the United States (Attia, 2019). The validation criteria adopted by NAAB focus on the acquisition of requisite technical and critical thinking skills by architectural graduates (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2021). Lastly, UIA is an accreditation program sponsored by the UNESCO and is the most recent accreditation process among the above-mentioned processes. The UIA validation criteria seek to guarantee quality of education, training and results consistent with the qualifications of an architect, and its manual aims to help institutions in designing the courses' syllabus (International Union of Architects, 2017).

For all the above accreditation agencies, the accreditation process is a well-established process that has been followed for years. As an initial step, these

agencies initially require a self-study report to be completed by the program to be evaluated presenting their qualifications and the details of their programs (Martin & Kroelinger, 2010). Through this step, the agency judge on the eligibility of the study program for accreditation (International Union of Architects, 2017). Yet, the final accreditation decision itself is put into the hands of highly experienced volunteer experts who base their decisions primarily through a site visit to the requesting institution. The number of experts forming these teams vary between different agencies; for example, CIDA's team consist of three experts while NAAB's team consists of four experts (Martin & Kroelinger, 2010). The visitation process usually lasts three or four days in which the team inspects the facilities; presented with a range of students' work from all subject areas; introduced to the curriculum for each year of the course; given access to works produced by the students and completed student exams for each year of study, final student works and projects, and research conducted by teachers (International Union of Architects, 2017). Moreover, during the visit, the team engages in private meetings with teachers and students in each year of study, graduates from the school, members of local professional associations, and the institution's senior academic managers (International Union of Architects, 2017). In addition, some agencies; like NAAB and RIBA, require a number of visits to reach a decision (Attia, 2019). The first visit is called exploratory visit in which the visiting team decides if the institution is candidate for accreditation or not (Attia, 2019).

#### 1-2 Problem Statement

With the increasing globalization, architectural firms and architects are no longer bounded to certain countries or regions but are expanding their services all over the world; furthermore, universities became more aware and focused on achieving a high level in international rankings (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2021). These two fundamental changes highlighted the need for these professionals and institutions to be accredited by international bodies (Masri & Arnaouty, 2015). Yet, despite the rapid technological advancements in the field of interior design, the accreditation processes for interior design programs did not match the rapid growth

and expansion of institutions in the globalized world (Acevedo-De-los-Ríos & Rondinel-Oviedo, 2021). The current accreditation process is often viewed by the applying institutions as being burdensome (Harvey, 2005), time consuming, and costly (Cheng, 2009; Pham, 2018). Moreover, an increasing number of institutions view the current accreditation process as too strict and requires too unnecessary paperwork (Utuka, 2011). Furthermore, the current accreditation process does not embrace inputs from several sources regarding the final accreditation decision of an institution or a program; hence, the final decision regarding the quality of the accreditation decision lies in the hands of three or four team members who conduct the site visit which jeopardizes the entire credibility of the process (Utuka, 2011).

Even though CIDA visiting teams conduct on-site review for the students' projects, there is a new innovative attempt to demonstrate students works digitally, beside paper-based projects. At CIDA workshop held in the Interior Design Educator Council conference 2011, The Art Institute of Pittsburgh presented their site visit case where digitally through a big screen that enabled reviewers to navigate through students' works remotely from freshmen to senior levels (Spewock, 2011). Moreover, CIDA provides accreditation services to distance learning ID programs that meets CIDA standards and eligibility requirements. The advancement of technology enabled ID programs to deliver their education via distance and campus-based methods.

Therefore, an innovated method that would enable those institutions to check program outcomes based on specific criteria, in a timely, less expansive, and more credible manner, in order to expand the reach of the accreditation bodies overseas, is needed. Hence, this study specifically seeks to (1) illustrate an alternative method for CIDA program accreditation processes (2) identify the advantages of the new and, tested, method for evaluating interior design program outcomes.

#### 1-3 Interior Design Education in Kuwait

In the state of Kuwait, there are only two main programs focusing on interior design: the Interior Design Department at the College of Basic Education (CBE) and the Interior Architecture Department at Kuwait

University. Other than that, Box Hill College in Kuwait provides an associate degree in interior design for female students only. The Interior Design Department, established in the 1980s, is the first and currently the only design program in Kuwait that offers a bachelor's degree for both male and female interior design students. The first interior design department in Kuwait plays a pivotal role in providing interior design instructors and practitioners in the national market.

#### 2- Literature Review

Competences in interior design profession are mainly acquired through education (Harwood, 1989). Nevertheless, competences acquired through education do not always match with those required and preferred by practitioners (Harwood, 1989). For instance, Myers (1982) found that only seven of the top twelve internal design competences are common, as identified by educators and practitioners; while Hernecheck, Rettig, & Sherman (1983) found only three overlapping competences. Hence, investigating the latest needed competencies by new interior designers from the practitioners' perspective is crucial in designing successful interior design educational programs and effective accreditation processes (Budd, 2011). Consequently, a number of research studies attempted to identify the most important competences from the practitioners point of view to increase the chances of the success of internal design graduates in the professional market.

One of the earliest attempts to identify the preferred competences for new interior designers by the interior design practitioners was conducted by Baker & Sondhi in 1989. In this study, the researchers attempted to determine competences required by entry-level interior designers in the USA by the top interior design firms in the country. Through a questionnaire survey distributed to the top design firms in the country, the researchers concluded that critical thinking of the design solutions is the number competence to look for in new interior designers (Baker & Sondhi, 1989). In addition, the ability to communicate verbally and through graphic presentation, as well as possessing professional ethics, presenting themselves as mature, enthusiastic, and well-groomed professionals were part of the important competences that the design firms look for in entry-level designers (Baker & Sondhi, 1989). Further studies during that time that aimed at identifying the important competences to be possessed by new internal designers included Tew (1992) who focused on communication and business skills; and Lee & Hagerty (1996) who focused on occupational expectations.

As the required competences evolve with the changes that take place in the interior design education and profession, this stream of research studies continued to flourish in the past decades due to the massive technological advancements and the shifts the scope and needs in projects during that time (Gale et al., 2017). One of these recent studies was conducted by Liao in 2016. In that study, the researcher focused on leadership skills for intern interior designers in Canada. Through an online questionnaire survey and 116 responses, it was deduced that six authentic leadership skills; namely: self-improvement, self-monitoring, goal-commitment, openness, positivity, and composure; as well as, four design leadership skills; namely: adaptability, professional, building-relationships and collaborative rank as the top ten skills thought after by practitioners in Canada (Liao, 2016). Furthermore, the researcher came up with recommendations for interior design educational programs to ensure that these skills are acquired by their graduates.

Another study that aimed at identifying the skills required by interior design interns was conducted by Gale et al. (2017). In that study, the researchers attempted to understand the perceptions of interior design practitioners towards the soft and hard skill sets required by new interior designers in the Midwest. A total of 260 responses over the period from 2006 to 2014 were collected and analyzed. The findings of the study showed that soft skills, such as positive attitude, work ethic, interpersonal skills, and professionalism were more valued by practitioners and influence hiring decisions for emerging interior designers. Computer software was the hard skill that was perceived as the most important skill in this category which includes rendering, drafting, and 3D modeling (Gale et al., 2017).

As these competences continuously evolve, Huber (2018) explored the preferences of the interior designers' hiring practitioners i.e. if these hiring practitioners prefer soft skills, hard skills, or specific

experiences when assessing a candidate for hiring. The findings of this study deduced that senior-level interior design practitioners tend to prioritize soft skills when screening candidates. This study was then followed by another research conducted by Huber & Waxman (2019) in which a comparison was conducted between the required competences for newly hired interior designers and experienced professionals. Consequently, the results confirmed that soft skills are the most thought after skills for newly hires; while, specific experiences were the most important set of competences for experienced interior designers (Huber & Waxman, 2019).

This stream of research studies was not only limited to North America, but it also gained popularity in other parts of the world. For instance, Alrifa & Raju (2019) found that, in Malaysia, soft skills; such as: communication skills, problems solving skills and teamwork skills, are the most thought after skills from interior design practitioners; while, hard skills; such as: style and computer skills, are also of importance to Malay practitioners. Lastly, Alawad et al. (2020) aimed to find out the most important competencies that entry-level interior designers should possess to practice the profession and the differences in the priority of these competencies between different graduation years in the Kingdom of Saudi Arabia. The results indicated that the highest ranked competencies were related to materials and lighting, client relationships and management, tasks related to project planning, resource and cost management, contract management, project supervision, and English language proficiency. On the other hand, based on the results of this study, there were no significant differences between the priority of these competencies in different graduation years (Alawad et al., 2020).

#### 3- Methodology

#### 3-1 The Proposed Evaluation Method

In order to evaluate interior design students' skills in comparison to local market level, two surveys were developed. The first survey is the expected skill survey which aimed to assess the average skill level expected from an entry-level interior designer. Participants were asked to rank the average skill level expected from an entry-level interior designer based on 10-point Likert scale (1 = Not-proficient, 10 = Pro-

ficient). The second survey was the project evaluation survey intended to evaluate ID students' projects. Participants were asked to evaluate each design project based on the fifteen design skills' items presented in table (1) using 10-point Likert scale (1= Incompetent; 10 = competent).

Consequently, in order to evaluate the ID program outcomes, the researcher collected forty (40) senior students' projects; however, only ten (10) design projects were selected randomly to be included in this study. The researcher selected ten (N =10) ID practitioners who served as evaluators using the snow-ball sampling technique. The selected design projects were attached to and evaluated using an online survey.

#### 3-2 Instruments

Two instruments were developed, which are the expected skill survey (see Appendix A) and project evaluation sheet (see Appendix B). The expected skills survey and project evaluation survey were developed based on fifteen ID skill items adopted from CIDA guidelines (CIDA, 2014) (see table 1). Both instruments were tested and evaluated by three ID educators who have expertise in CIDA site visit review.

Design Skill Areas	
Designing	Selecting and Applying Color In
appropriate spatial	Design Solutions
layout	
Generating Multiple	Designing
Design Solutions	Luminaires and Lighting Sources
Defining Design	Applying Universal Design
Goals, Objectives &	Principles
Problems.	
Producing 2-D	Making Informed Selection of
Design Solutions	Materials
Produce 3-D Design	Using Computer Design Software
Solutions	
Expressing Design	Designing Historical Precedents
Ideas Through	To Inform Design Solutions
Sketches	
Producing Furniture	Applying International Building
and Fixture Layouts	Codes
	and Fixtures That Is Appropriate In
Scale	11 1 =

Table (1): Design skill areas

#### 3-3 Data collection

The ID evaluators were recruited through their email addresses. An email was sent to participants with a link that directed them to the online survey to which the students' design projects were attached. Participants were asked to evaluate these projects based on CIDA standards and complete the first survey first before proceeding to the second one A purposive sampling technique was used in the study.

#### 3-4 Data analysis

Quantitative data analysis was employed in the study through survey questionnaires. Both surveys employed a 10-point Likert scale. Hence, in order to find out whether the design skills meet the expected skill levels, the mean value for each skill item in the expected skills survey and project evaluation survey were compared to determine if ID students had the average expected design skill level required for an entry level interior designer.

#### 4- Findings and Discussions

The new evaluation method eliminated several challenges and provided several advantages, which are: site visit time constrains, travel expenses, overseas travel issues, limited number of reviewers, and human prejudice.

#### Site visit time constrains

It is often difficult for reviewers to find time to conduct a site visit to evaluate the students' projects. Hence, the online tool developed in this study enabled practitioners to review the interior design students' projects on-line at their convenient times within one month. This tool made it easier for reviewers to participate in the accreditation process which, overall, facilitated and expedited the said process.

#### Travel expenses

Similarly, the lack of need for site visits helped in lowering the costs of the overall accreditation process. In general, the program seeking accreditation is responsible for paying all necessary costs to administer the accreditation process; not only CIDA's accreditation policy and procedure fees but also the visiting team travel expenses, including: transportation, accommodations, and meals; which puts a financial burden on the entity seeking accreditation. Consequently, the new accreditation method developed in this study eliminates the travel expenses related to the

site visit which improved the financial worthiness of the accreditation process from the accreditation seeking entity's point of view. Even if CIDA accreditation may need an on-site presentence, instead of needing three reviewers, the researcher recommends having only one reviewer present on-site, and a team of five or more offsite. Through video conferencing tools, reviewers would be able to talk and discuss necessary points regarding students' work, determine compliance with CIDA standards and reach an accreditation decision.

### Expansion of CIDA accreditation services

Another related advantage of the newly developed method is getting rid of any difficulties facing the accreditation regarding travel logistics which will help increasing the level of accreditation by oversees entities. As of March 2019, there were only two ID programs accredited by CIDA located overseas, outside North America, which are Virginia Community University in Qatar and the American University in Dubai, United Arab of Emirates. This limited number of overseas accreditation was mainly due to the higher travel expenses of CIDA site visits when performed internationally. Therefore, this method will enable CIDA to expand their accreditation services to interested ID schools located overseas and will increase and spread CIDA standards to be more globally acceptable.

#### **Overseas travel issues**

Furthermore, these logistical difficulties were high-lighted more during the COVID-19 pandemic. As COVID-19 became a global pandemic, many countries and territories set travel restrictions toward international travelers which influenced the accreditation process and site visit requirements. Hence, the proposed method in this study will help interior design programs seeking accreditation to fulfill their goals in timely manner.

#### Human prejudice

Another major advantage of this new method is avoiding human prejudice. Having the reviewers off-campus would eliminate personal bias and prejudice since evaluators will review the design projects by themselves without any influence of other teams, or prejudice with the design school seeking accreditation. Moreover, this alternative method eliminates the

social and cultural issues that might occur during the accreditation process.

#### **Limited Number of reviewers**

Lastly, since the new method is done electronically, more than three reviewers can be invited to participate which will help in increasing the efficiency and credibility of the accreditation process.

#### 5- Research Recommendations

The recommendations extracted from this study are summarized as follows:

- This method would be beneficial for testing the program outcomes before seeking CIDA accreditation. In this way, the program would evaluate the weaknesses and gaps that may not be covered by CIDA standards. Predetermining areas that needs improvements, prior to the site visit, is crucial for preparing the students' projects that are compliant with CIDA standards. Also, the proposed method would be a great tool for researchers who are seeking to examine program outcomes based on predetermined competencies.
- Interior design educators may use this method for evaluating a program outcomes based on certain standards, such as CIDA, The National Architectural Accrediting Board (NAAB), or the National Association of Schools of Art and Design (NASAD) guidelines. Also, they may use it to evaluate the program based on the market's needed competencies sought by entry-level interior designers.
- Interior design accreditation agencies should implement the alternative program evaluation method in order to expand their services internationally.

#### 6- Conclusion

As CIDA accreditation is growing and spreading internationally, it's important to consider newly thoughtful ways to facilitate the accreditation process. The proposed accreditation method is fitting for this era with the presence of new technological tools that facilitate its implementation.

Nevertheless, this research has a few limitations due to the nature of the study. Based on the backgrounds and experience of the researcher, the findings could be biased as these characteristics have shaped their interpretations of the data (Creswell, 2009). However, it is hoped that having both interior design and ar-

chitecture professions represented by the researchers and the CID's experience as a CIDA site visitor and as a program administrator involved in CIDA site visits at various institutions have created a balance and minimized inherent biases.

Other limitations involved utilizing CIDA standards only as one of the internationally well-known ID accreditation standards, so no other accreditation requirements or procedures were considered. In addition, this research study implemented certain CIDA standards that could be appropriately measured by the research instrument, whereas criteria such as: collaboration, communication (oral and written communication), professionalism, and business practice, were not implemented since they need other data collection tools. Thus, the study is limited to hard design skills, and excluded soft and personal skills. As a result, the findings of this study cannot be generalized beyond these data. Therefore, future studies should look at other CIDA standards that were not implemented in this study; while other research should implement other ID accreditation guidelines, such as: NASAD or RIBA.

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## APPENDIX A EXPECTED SKILL SURVEY

<u>Instructions</u>: Please read each statement carefully and then check (  $\forall$  ) the response that best shows your opinion.

1. What is the average skill level expected from an entry-level interior designer to be productive in designing an **appropriate "spatial layout"** (space planning & special adjacencies)?

Not-pi	Not-proficient proficient										
1	1 2 3 4 5 6 7 8 9 10										

2. What is the average skill level expected from an entry-level interior designer to be productive in selecting furnishings and fixtures that is appropriate "in scale" for the space being designed?

Not-pi	Not-proficient proficient										
1 2 3 4 5 6 7 8 9									10		

3. What is the average skill level expected from an entry-level interior designer to be productive in producing "2-D design solutions"?

Not-proficient proficient										
1 2 3 4 5 6 7 8 9 10										

4. What is the average skill level expected from an entry-level interior designer to be productive in producing "3-D design solutions"?

Not-pi	Not-proficient proficient										
1 2 3 4 5 6 7 8 9 10											

5. What is the average skill level expected from an entry-level interior designer to be productive in "generating multiple design solutions" (e.g. by using blocking, bubble diagrams, etc.)?

•		0		0	` '			<u> </u>		. ,
Not-proficient proficient										
	1	2	3	4	5	6	7	8	9	10

6. What is the average skill level expected from an entry-level interior designer to be productive in "defining the design goals, objectives and problems"?

Not-p	Not-proficient proficient										
1 2 3 4 5 6 7 8 9 10											

7. What is the average skill level expected from an entry-level interior designer to be productive in expressing design ideas through "sketches"?

Not-p	Not-proficient proficient										
1 2 3 4 5 6 7 8 9 10											

8. What is the average skill level expected from an entry-level interior designer to be productive in producing design drawings (e.g. floor plan, elevations, section, and perspectives) "using computer design software" (Revit, CAD, Photoshop, etc.)?

Not-proficient proficient										
1 2 3 4 5 6 7 8								9	10	

9. What is the average skill level expected from an entry-level interior designer to be productive in appropriately "selecting and apply color" in design solutions?

Not-p	Not-proficient proficient										
1 2 3 4 5 6 7 8 9 10											

10. What is the average skill level expected from an entry-level interior designer to be productive in **producing furniture and fixture "layouts"**?

Not-p	Not-proficient proficient										
1	2 3 4 5 6 7 8 9										

11. What is the average skill level expected from an entry-level interior designer to be productive in **making "informed selection of materials"** (based on properties, performance criteria, and life cycle cost)?

Not-proficient proficient										
1 2 3 4 5 6 7 8 9 10										

12. What is the average skill level expected from an entry-level interior designer to be productive in **designing "luminaires and lighting sources"** (e.g. reflected ceiling plan and sconce light)?

Not-p	Not-proficient proficient											
1	2	3	4	5	6	7	8	9	10			

13. What is the average skill level expected from an entry-level interior designer to be productive in **designing "historical precedents" to inform design solutions** (e.g. typology, spatial organization, and/or historical references)?

Not-proficient proficient											
1	2	3	4	5	6	7	8	9	10		

14. What is the average skill level expected from an entry-level interior designer to be productive in "applying International Building Codes" in their design projects?

Not-pi	Not-proficient proficient										
1	2	3	4	5	6	7	8	9	10		

15. What is the average skill level expected from an entry-level interior designer to be productive in **implementing "universal design principles"** (usable environments by all people to the greatest extent possible) in design projects?

Not-proficient proficient										
1	2	3	4	5	6	7	8	9	10	

## APPENDIX B PROJECT EVALUATION SHEET

<u>Instructions</u>: Please read each statement carefully and then check ( $\forall$ ) the response that best shows your opinion and evaluation of the project shown.

1. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on designing an "appropriate spatial layout" (space planning & special adjacencies)?

Not Available	Incom	petent						Comp	etent	
	1	2	3	4	5	6	7	8	9	10

2. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on selecting furnishings and fixtures appropriate "in scale" for the space being designed.

Not Available	Incor	npetent						Com	petent	
11vanasie	1	2	3	4	5	6	7	8	9	10

3. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on producing "2-D design solutions".

Not Available	Incor	npetent						Com	petent	
11,011,011	1	2	3	4	5	6	7	8	9	10

4. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on producing "3-D design solutions".

Not Available	Incor	npetent						Com	petent	
11,0220015	1	2	3	4	5	6	7	8	9	10

5. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on "generating multiple design solutions" (e.g. blocking, bubble diagrams, etc.).

Not Available	Incor	npetent				-	-	Com	petent	·
Tvanaoic	1	2	3	4	5	6	7	8	9	10

6. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on defining the design goals, objectives and problems.

Not Available	Incon	npetent		Competent						
Transition	1	2	3	4	5	6	7	8	9	10

7. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on expressing design ideas through "sketches".

Not Available	Incon	npetent		Competent						
Tivanaore	1	2	3	4	5	6	7	8	9	10

8. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on producing design drawings "using computer software" (Revit, CAD, Photoshop, etc.).

Not Available	Incor	ncompetent Competent										
Available	1	2	3	4	5	6	7	8	9	10		

9. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on "selecting and applying color" in design solutions.

Not Available	Incor	npetent				Competent				
Tivanaore	1	2	3	4	5	6	7	8	9	10

10. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on **producing furniture and fixture "layouts".** 

Not Available	Incor	Incompetent Competent								
11/0110010	1	2	3	4	5	6	7	8	9	10

11. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on **making "informed selection of materials"** (based on properties, performance criteria, and life cycle cost).

Not Available	Incor	npetent		Competent						
11/0110012	1	2	3	4	5	6	7	8	9	10

12. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on **designing "luminaires and lighting sources".** 

Not Available	Incor	npetent		Competent						
11,011,011	1	2	3	4	5	6	7	8	9	10

13. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on **designing "historical precedents" to inform design solutions** (e.g. typology, spatial organization, and/or historical references).

Not Available	Incor	Incompetent Competent								
Tivanaore	1	2	3	4	5	6	7	8	9	10

14. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on appropriately "applying International Building Codes" in design projects?

Not Available	Incor	Incompetent Competent								
Tivanaore	1	2	3	4	5	6	7	8	9	10

15. In the scale below (1 is incompetent and 10 is competent), please evaluate the design project based on appropriately implementing "universal design principles" (e.g. equitable use, low physical efforts, tolerance for error, Simple and intuitive).

Not Available	Incor	Incompetent Compete								
Tivanasie	1	2	3	4	5	6	7	8	9	10