

Ames, Iowa USA

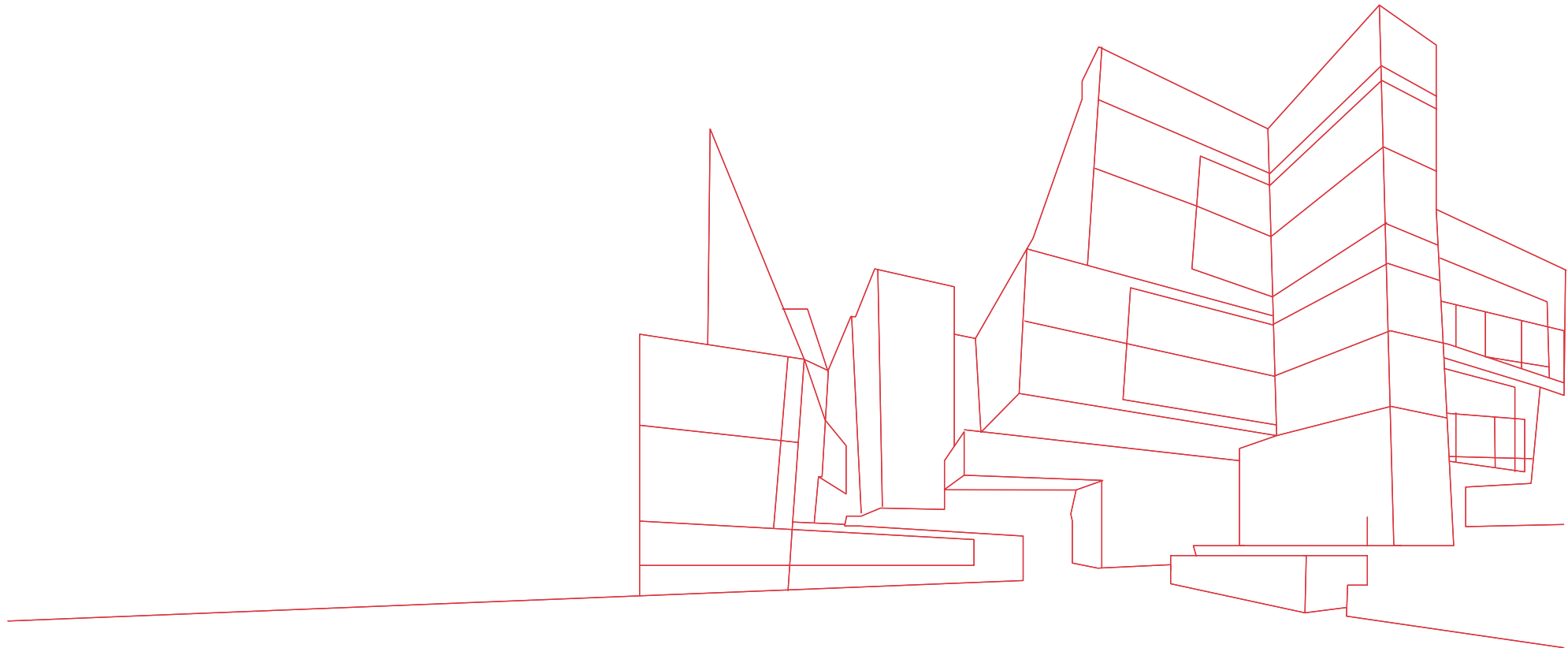
Surveying Stakeholders: Research Informing Design Curriculum

Andrea L. Quam

Iowa State University



Literature Review
Research Methods
Discussion
Conclusions



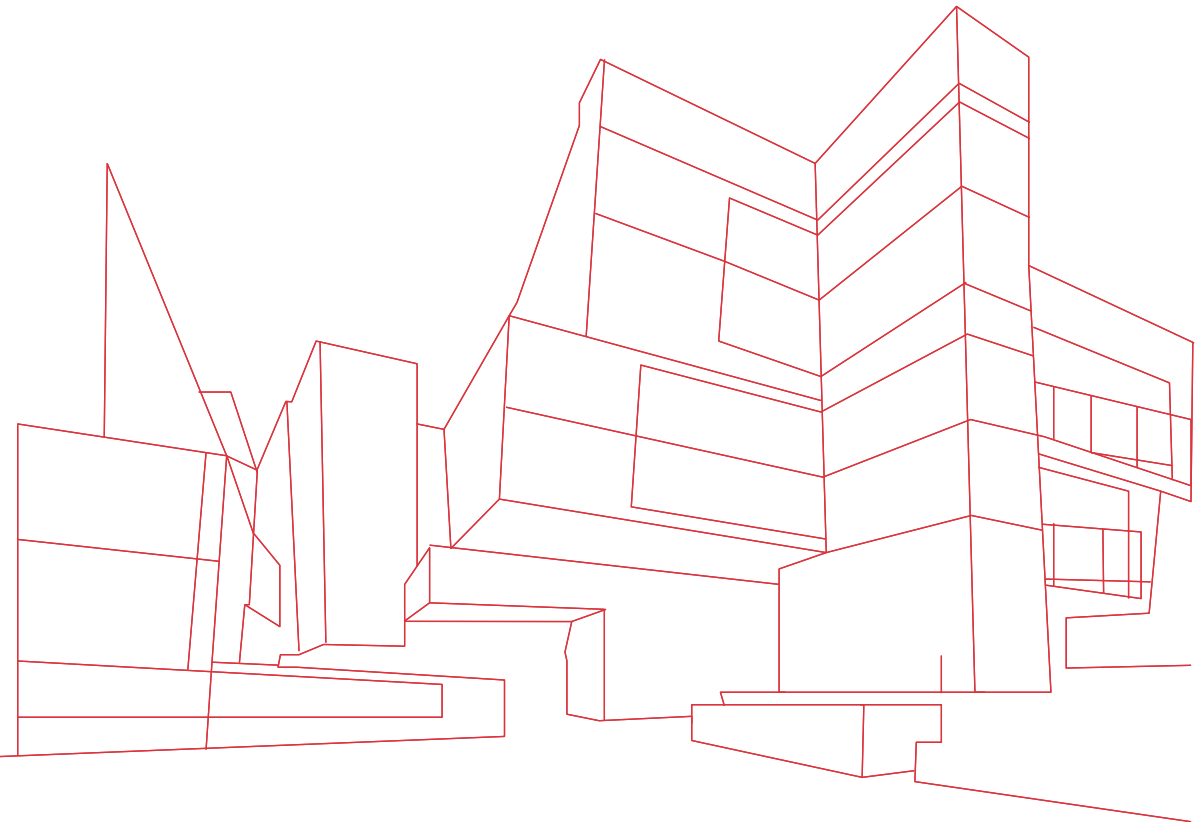
Literature Review: proper and effective development of survey tools

Advantage = inexpensive, provide high-volume, time-efficient data collection

Disadvantage = inaccurate, incomplete or mischievous responses and low response rates

Should include = intro, purpose, contact, ethics approval, time required [less than 10 min]
+ assurances of anonymity

Literature review ensure no repetition



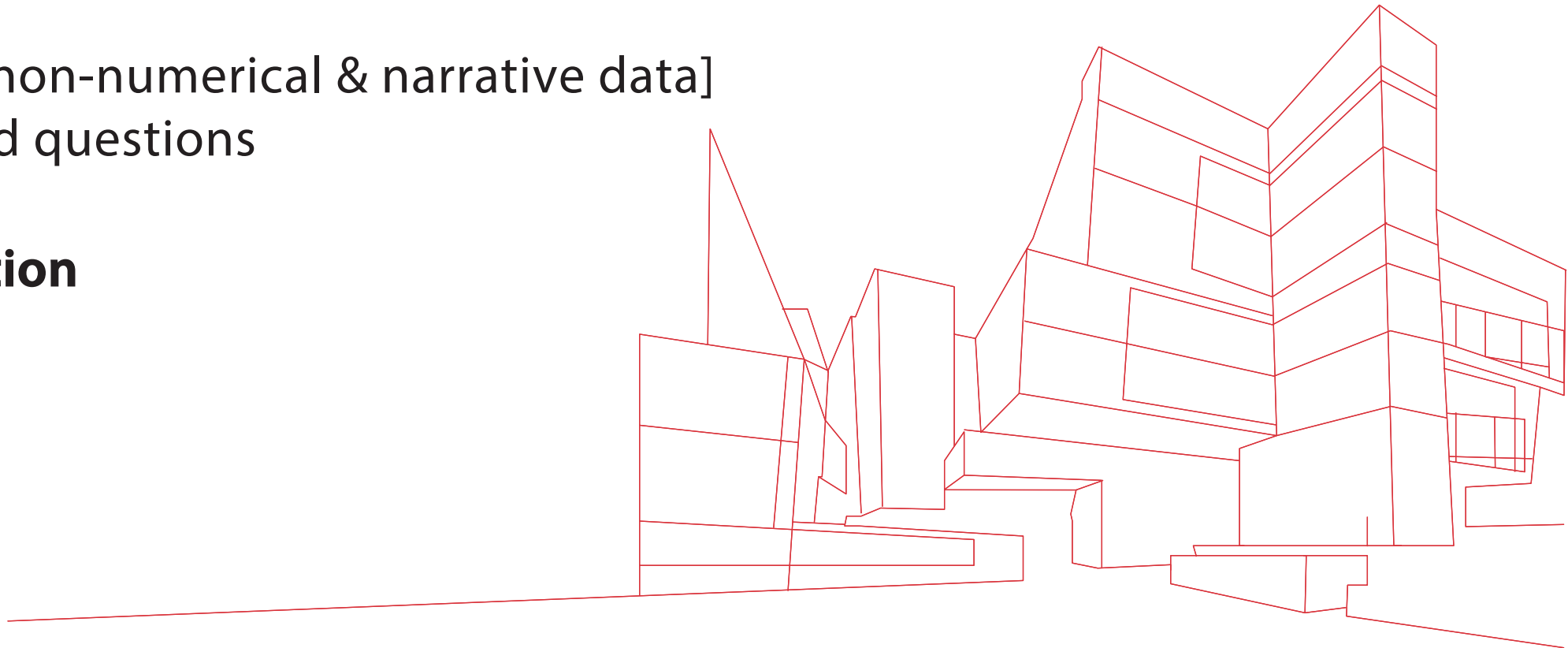
Literature Review: proper and effective development of survey tools

Questions short, focused, 12 words or less

Quantitative = [quantified thus numerical]
structured questions – easier to interpret

Qualitative = [non-numerical & narrative data]
use open ended questions

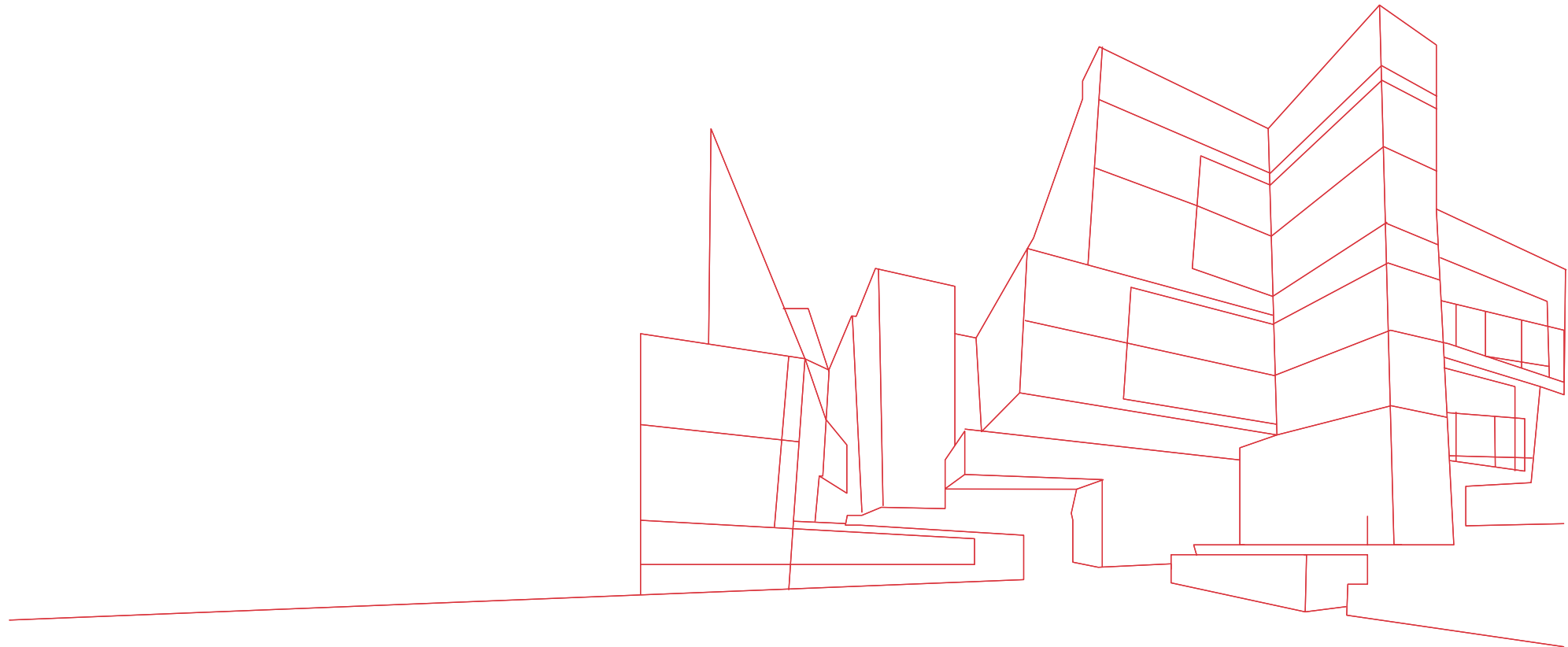
The 'other' option



Literature Review: proper and effective development of survey tools

Kinds of Questions:

- open
- closed
- quantity
- list
- category
- ranking/scaled
- grid question



Literature Review: proper and effective development of survey tools

To be avoided:

hypothetical

imprecise

ambiguous

assuming

leading or loaded

presuming

Sequencing

easy, non-threatening, non-sensitive *first*

filter questions helpful



Research Methods: execution of survey tool

Qualtrics

Stakeholders

Students, educators, and professionals

Question development

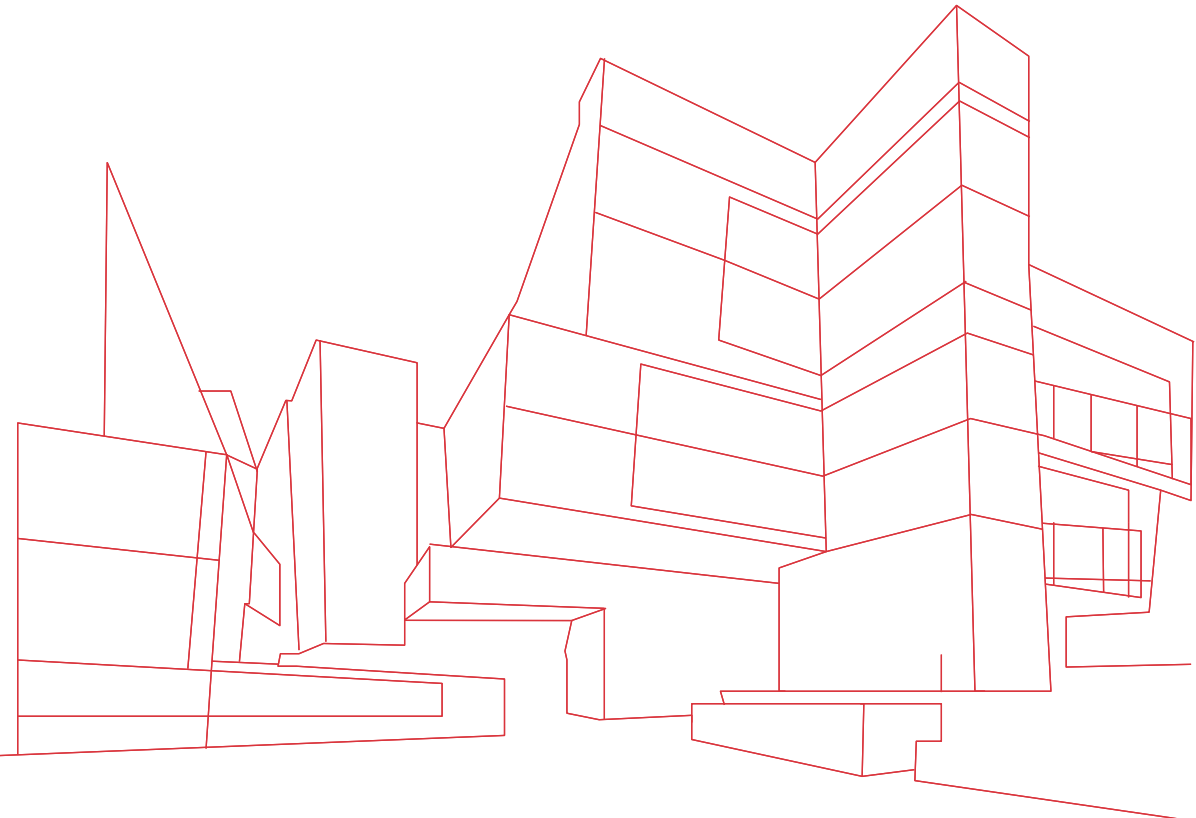
vetted by faculty, tested by focus groups

Distribution

students = class lists

Educators, professionals = email,
social media, and alumni lists

2 month distribution cycle



Research Methods: execution of survey tool

Survey structure

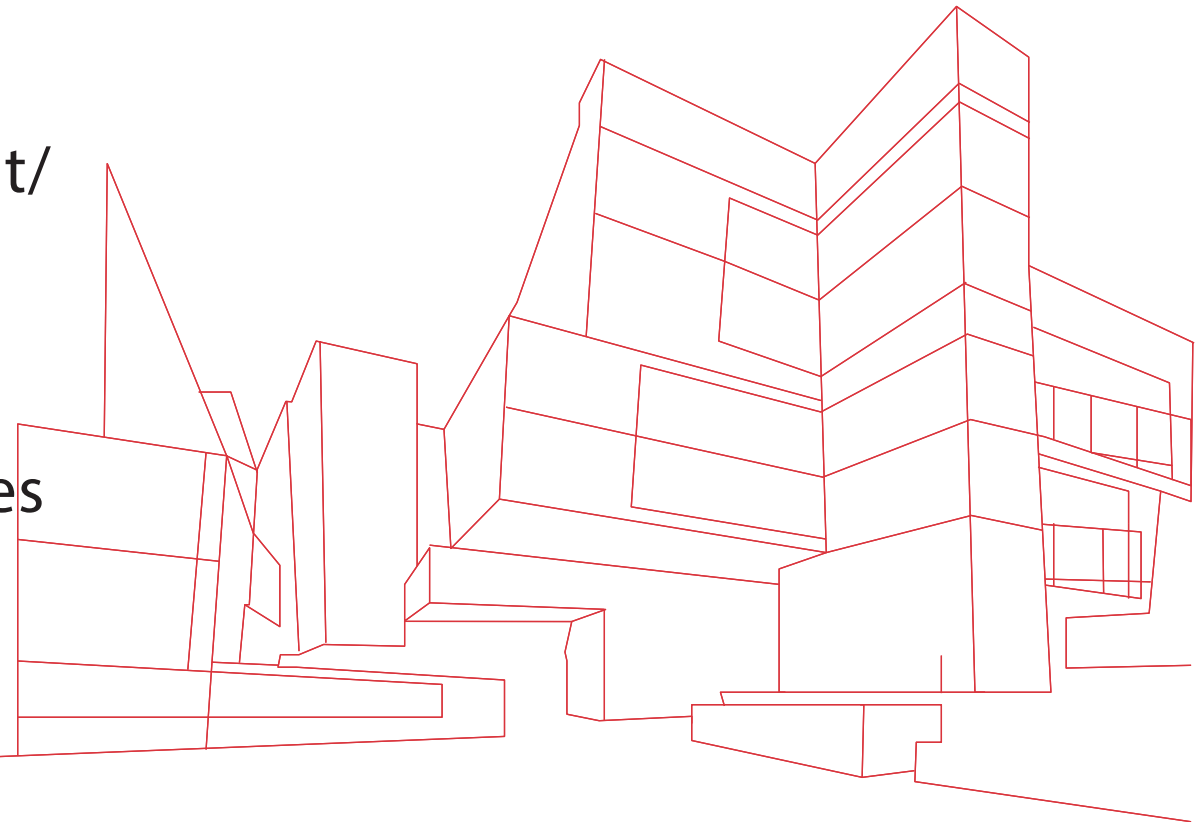
stakeholder filter questions

bank of questions for each dozen or less

individual questions relevant to investment/
perspective of curriculum

two 'common' questions for all =
perceived curriculum strengths, weaknesses

qualitative & quantitative
blend of open, closed, list and category ?s

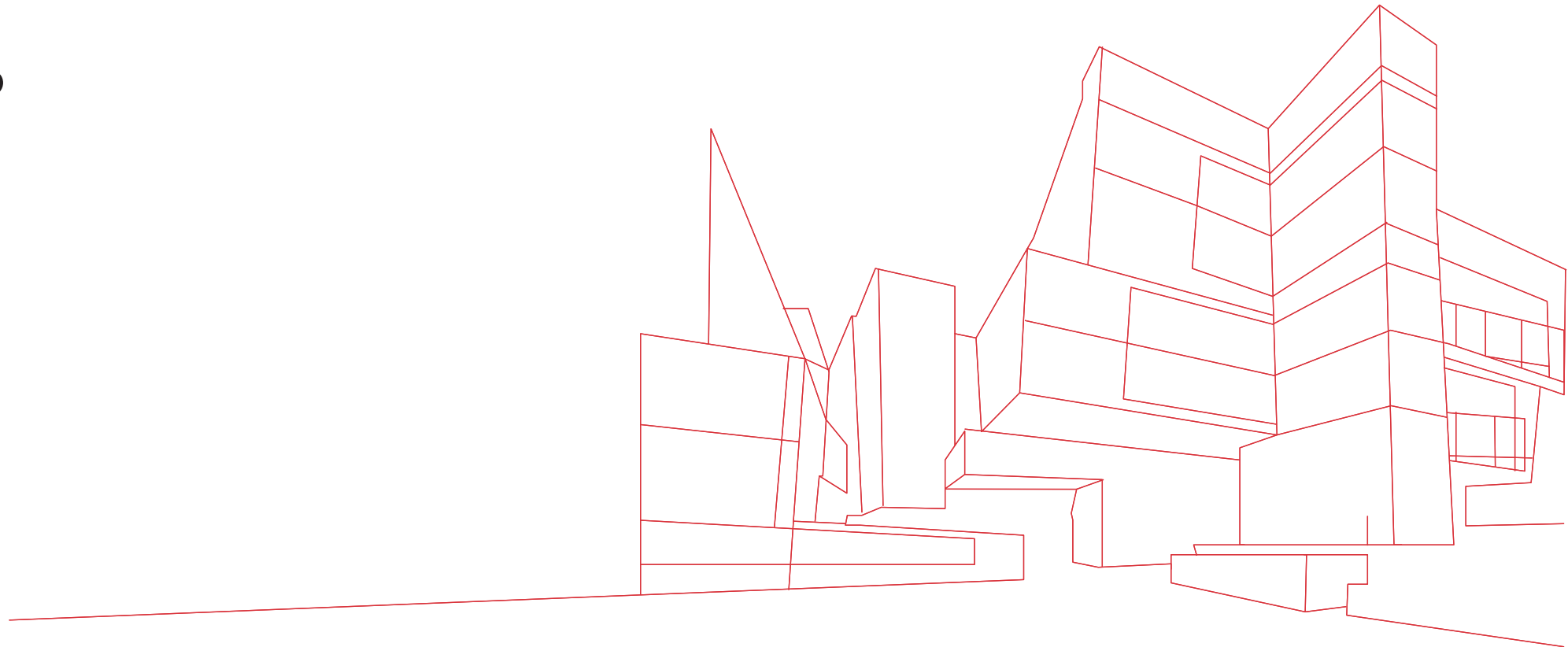


Discussion: students | educators | professionals

Students = 145

Professionals = 78

Educators = 36



Discussion: students | educators | professionals

69 freshman, 19 sophomores, 20 juniors and 33 seniors

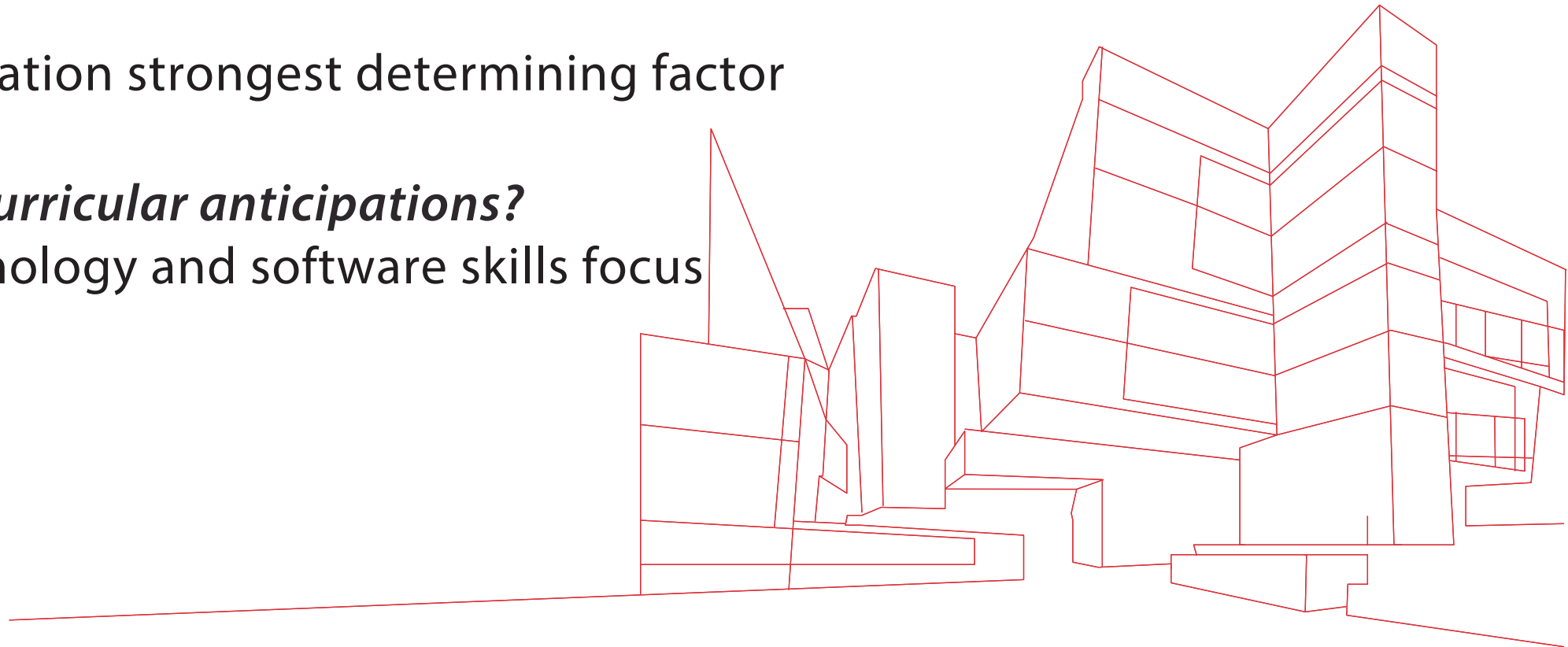
ALL : *Did you consider another school?*

56% Yes

geographic location strongest determining factor

FRESHMAN : *Curricular anticipations?*

Expected technology and software skills focus



Discussion: students | educators | professionals

EXISTING STUDENTS : *curriculum delivery preferences?*

Technology preferred within curriculum [vs. online, Lynda.com]

Business papers and portfolio as part of curriculum

UPPERCLASSMEN : *Curricular Expectations?*

Career focus, skills for professional practice

Design knowledge

Specific types of projects



Discussion: students | **educators** | professionals

39 respondents

Q1 *level of experience*

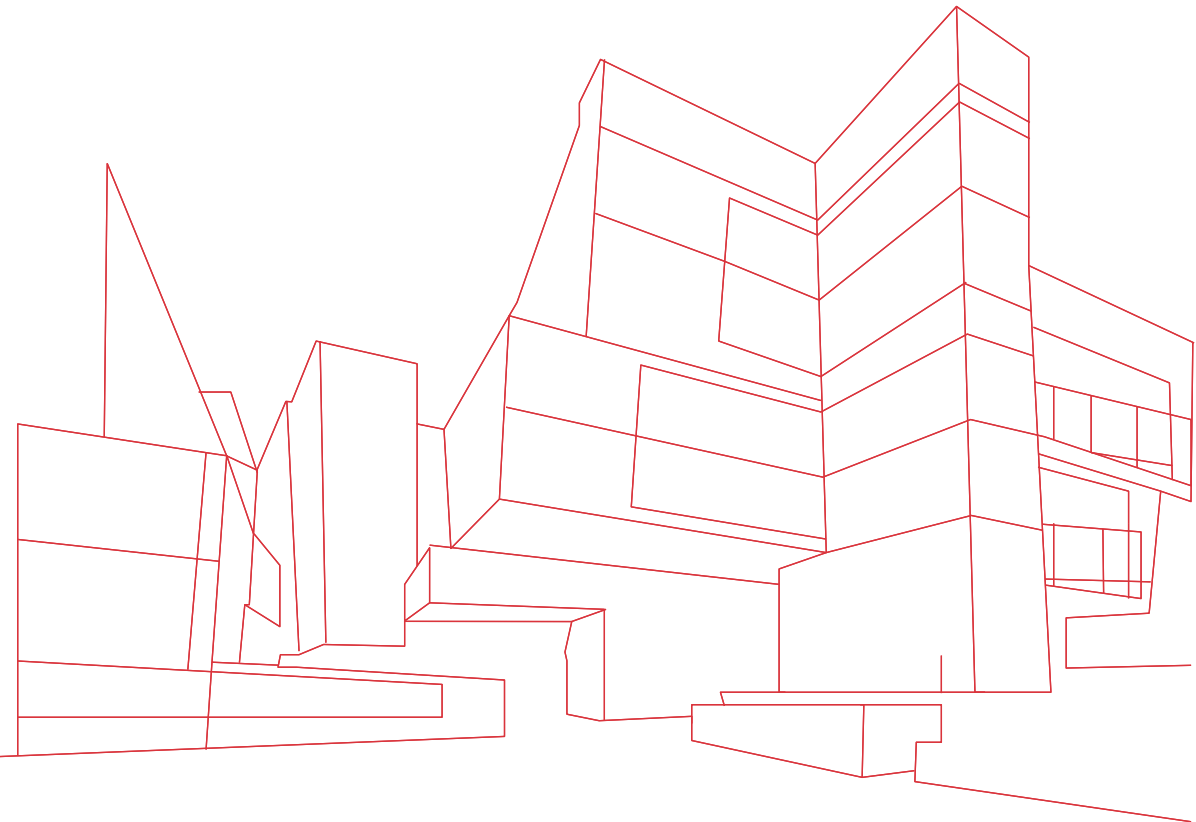
4-9 years majority at 36%

Q2 *graduate degree*

20 different programs

Q3 *what makes effective curriculum?*

- courses and program structure
- type of projects
- focus on: knowledge, skills,
problems solving & critical thinking



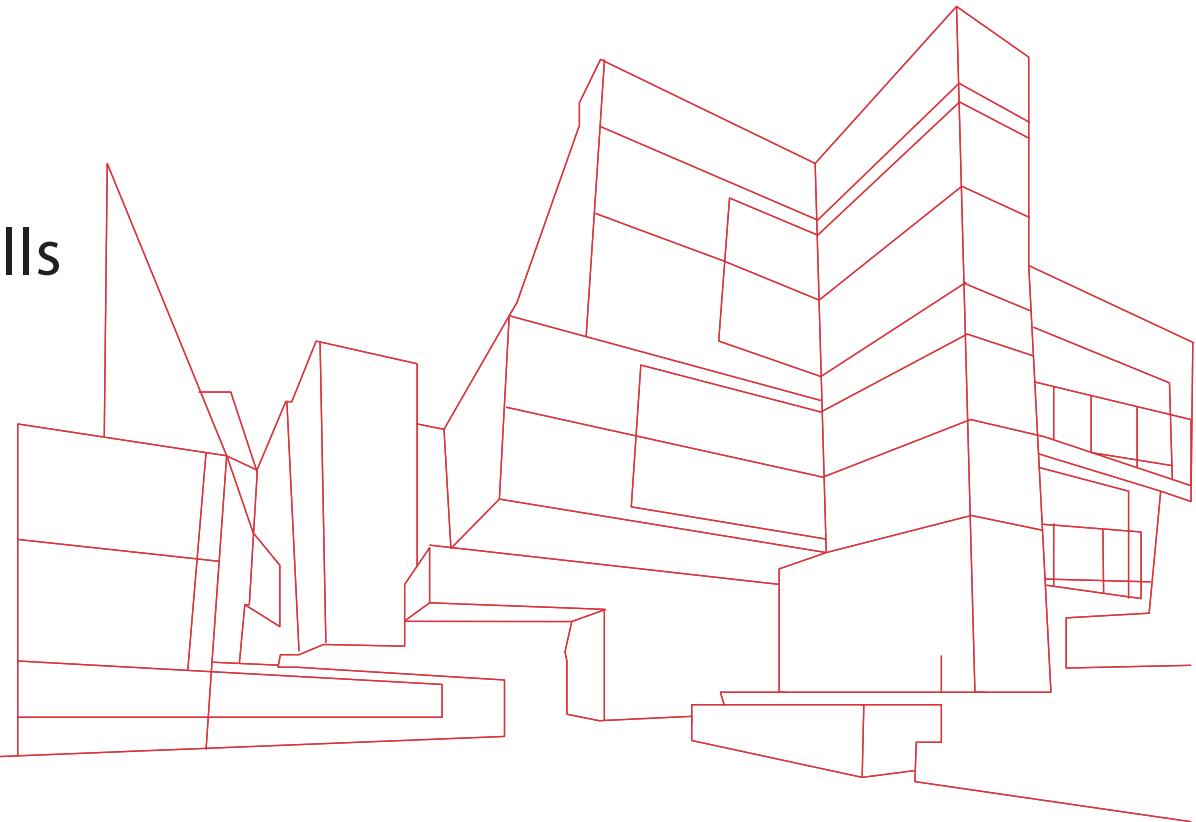
Discussion: students | **educators** | professionals

Q4 integral for curriculum to meet future needs?

Open ended, not common themes...

top themes [4-5 educators referenceing each]

- focus on thinking and problem solving
 - digital and interactive design
 - design fundamentals & foundational skills
 - balanced and diversified curriculum
-
- collaborative, networked focus
 - experimentation & curricular flexibility
 - user and human behavior
 - industry focus



Discussion: students | educators | **professionals**

78 respondents

Q1 *level of experience*

10 years or more 31%

4-9 years 27%

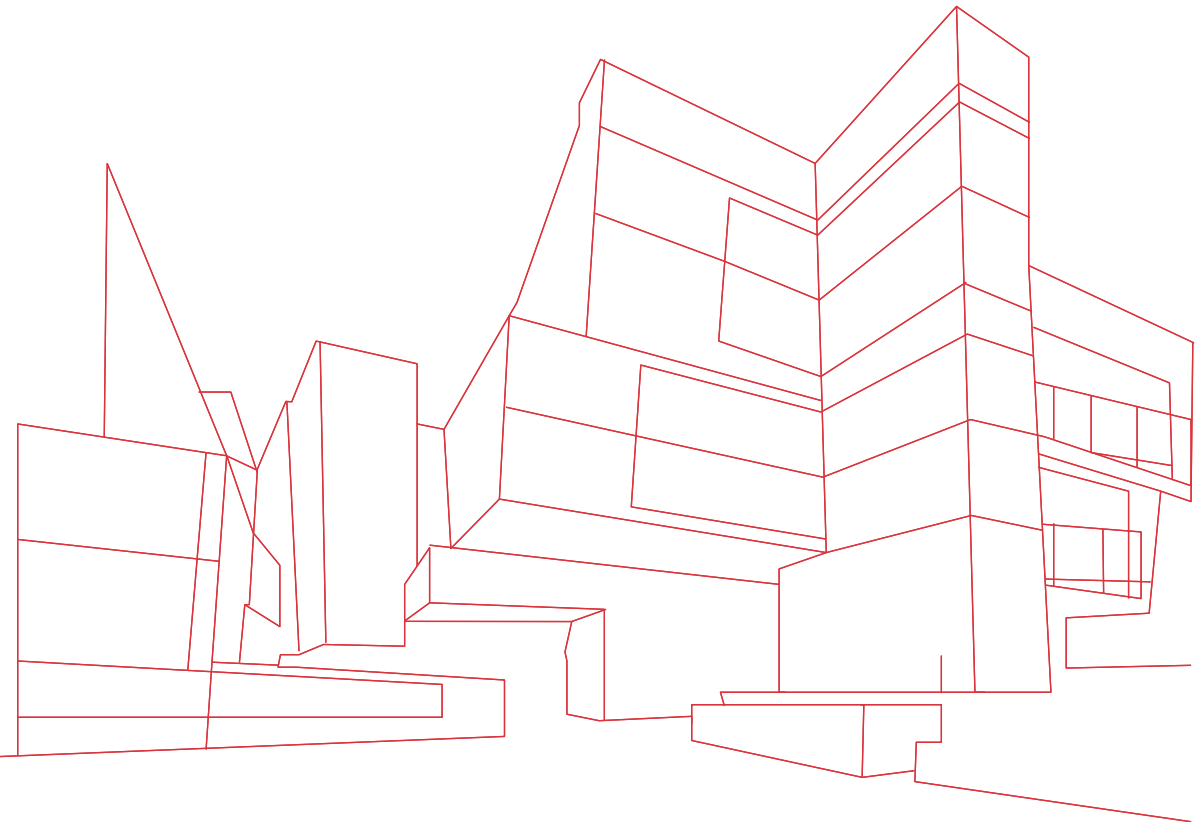
Q2 *type of design work*

28% equal amount of print and digital

17% majority of print

9% entirely print

16% entirely digital



Discussion: students | educators | **professionals**

Final Questions *Future Skills + Determining Hiring Factors?*

Future skills

- strong thinking abilities [problem solving, strategy, creativity]
- adaptability
- digital knowledge
- communication and leadership
- user experience

Hiring factors

- easy to work with
- thinking abilities
- willingness to learn

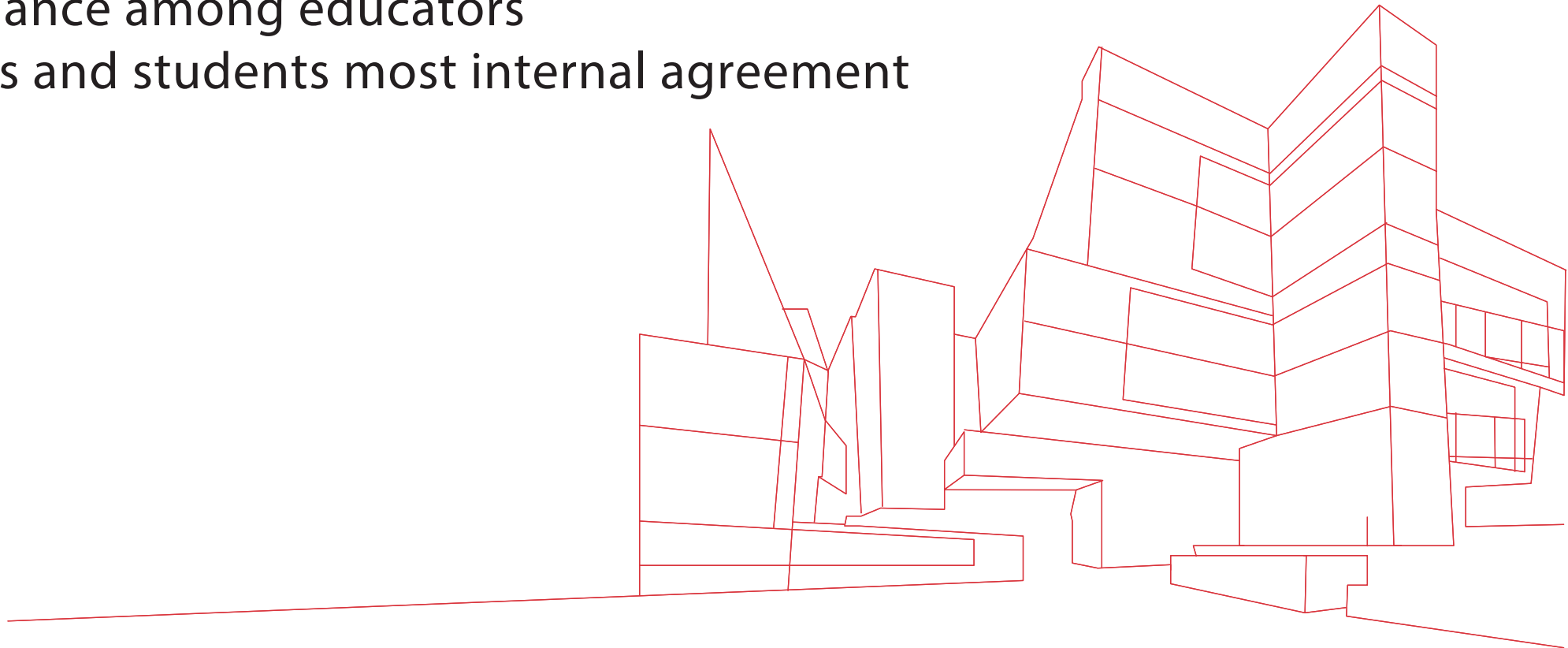


Discussion: students | educators | professionals

Common Questions

Existing curricular strengths and weaknesses

- greatest variance among educators
- professionals and students most internal agreement



Conclusions

Helps alleviate bias and misconceptions

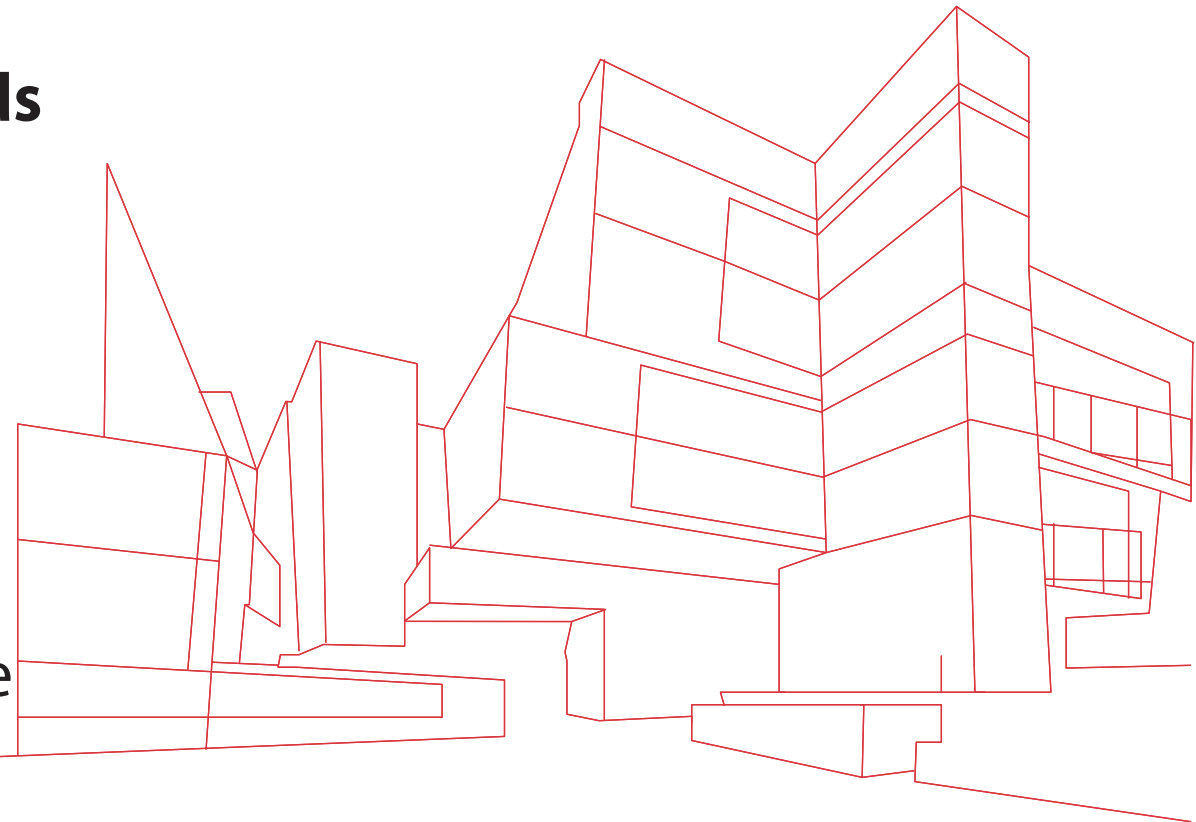
Changed intended delivery methods

Quantitative aided focus on student needs

Discussion from idealistic to pragmatic

Decisions logical and informed

Beyond accreditation standards —>
individual program's needs & circumstance



Thank you

Andrea L. Quam

Iowa State University

aquam@iastate.edu

