

Are They Learning What We're Teaching?

A WORKSHOP ON DESIGNING STUDENT LEARNING ASSESSMENTS

Sponsored by the Planning Accreditation Board

Laurie S. Goldman, Ph.D. (she, hers)

Urban & Environmental Policy & Planning, Tufts University

What you'll gain from the workshop

- Understanding of student learning objectives (SLO) that are meaningful, useful, and feasible to assess
- Ideas for SLO assessment strategies and tools you might consider
- Consider common challenges and how to avoid them
- Start designing your student learning outcomes assessment strategy

Session Agenda

1. What are Student Learning Outcomes (SLOs) and why assess them?
 2. Which SLOs should we assess?
 3. Strategies for meaningful, useful, and feasible SLO assessment
 - a. Selecting the learning activities
 - b. Developing indicators and measurements
 - c. Data collection, analysis, and interpretation
 - d. Using the findings
 5. Challenges of assessing SLOs
 6. Crafting your SLO assessment plans
-

What Are Your Goals for Student Learning?

1. Based on student work you've seen, what have been 1-3 of the **greatest gains** in student learning in the past year or so?
2. What do you wish students had **learned better**? -- Identify 1-3 areas.
3. What are 1-3 of the most important signs of learning – **evidence that they're developing** the knowledge, skills, appreciation and application of values – you hope to see among your students?

Enter your thoughts in the [GoogleDoc](#) (#1).

What are Student Learning Outcomes (SLOs)?

“Student learning outcomes clearly state the expected knowledge, skills, attitudes, competencies, and habits of mind that students are expected to acquire at an institution of higher education.”

- National Institute for Learning Outcomes Assessment

Why assess Student Learning Outcomes? – *External audiences*

- **Comply with mandates:** i.e., accreditation requirements
- **Demonstrate students' level of “competence” or “mastery”**
 - to university decision-makers, other accreditation bodies, funders
 - to prospective employers of our students
 - to prospective students considering our program – *what is distinctive about it (Are we “walking our talk”?)*

Why assess SLOs? - *Internal audiences*

- **To improve teaching and learning efforts by identifying ...**
 - program-wide curriculum gaps
 - needs for alternative or additional pedagogy/approaches to teaching and learning
 - strengths to celebrate, preserve, and replicate in other domains
- **To align student learning outcomes in relation to ...**
 - changes in our curriculum – *Are they delivering expected improvements?*
 - changes in our student cohorts – *Are we responsive to changing needs?*
 - changes the field – *Are we keeping up with emerging demands?*

Student Learning Outcomes vs. *Program Outcomes*

FOCUS ON ***STUDENTS***

What students do....

- assignments
- tests
- thesis
- capstone projects
- internships
-

As opposed to....

Program curriculum

- courses offered
- types of pedagogy
- teaching styles

Faculty

- expertise
- teaching skills
- investments in teaching (no. of faculty, teaching time)

Course evaluations

Student *Learning* Outcomes vs. Other Outcomes

FOCUS ON *LEARNING*

Knowledge: What we want them to *know* by the end of the program.

Skills: What we want them to be able to *do* by the end of the program

Values, Sensibilities, Habits of Mind:
What we want them to be able to *discern, prioritize, raise up, or challenge...*

As opposed to...

- Retention and graduation rates
- Student and alumni satisfaction
- Employment rates or types of positions
- Service to the profession, communities, ecosystems...

Student Learning *Outcomes* vs. *Inputs and Impacts*

FOCUS ON *OUTCOMES*

What they have internalized and can apply in practice

How much they have learned

How well they can apply skills in practices

The gaps in their knowledge, skills, and sensibilities

Distinctive strengths in their knowledge, skills, and sensibilities

As opposed to...

Inputs into learning:

- new readings, assignments, approaches to teaching
- whether/extent to which students completed the learning activities
- students' and faculty's efforts to improve
- enthusiasm and commitment to learn and grow more

Impacts of learning: employment, contributions and influence in field,

Leveraging current your assessment efforts

What are you already doing to assess how your students are achieving key learning goals?

Do these assessments focus on **students, their learning**, and the **outcomes of their learning** in your program?

What additional student learning outcomes might you assess?

[GoogleDoc](#) #11

Which Desired Learning Outcomes Should We Prioritize?

- External requirements (e.g. PAB standards), expectations of the field
- What is important to students, faculty, employers, communities
- What is distinctive about your program (“special sauce”)
- Priorities in your program’s strategic plan
- Where you know there is room for improvement
- Where it’s feasible to make changes
- Those that apply to *all* your students (or *all* in a track or program)

Categories of Learning Outcomes to Assess

([GoogleDoc](#) prompt III.)

Knowledge: *What we want students to know.*

Skills: *What we want students to be able to do.*

Guiding Planning Values: (sensibilities, attitudes, habits of mind): *What we want them to be able to discern, prioritize, raise up, or challenge...*

Measuring Student Learning Outcomes

Direct Measures: *Preferred priority*

Tangible, visible, and self-explanatory evidence of what students have and have not learned as a result of a course, project, or other activity that demonstrates student learning itself.

Indirect Measures: *Valuable supplement*

Opinions, perceptions, reflections or secondary evidence of students' (or graduates') knowledge, skills, attitudes, learning experiences to make *inferences* about student learning.

Selected references:

Palomba, C.A., & Banta, T.W. (1999). *Assessment essentials: Planning, implementing, and improving assessment in higher education*. San Francisco: Jossey-Bass.
Suskie, L. (2009). *Assessing student learning: A common sense guide*. (2nd ed.). San Francisco: Jossey-Bass.

Examples of **DIRECT** Measurement Mechanisms

Course embedded:

- Papers and other assignments
- Exam questions
- Oral presentations

Culminating projects

- thesis, capstone projects
- qualifying examinations (already required)

Exams (not course connected)

- Program Developed Exams: comprehensive exams, pre- and post-tests
- AICP exams (post-graduation) – *attention to question clusters*

Examples of INDIRECT Measurement Mechanisms

Course Grades

Limitations: not distinguish specific knowledge, skills, value sensibilities acquired; may include participation, other factors

Supplementary value: low averages or trends can signal areas for improvement

Student and Alumni Surveys, Interviews, & Focus Groups

Limitations: bias of self-reporting; low-response/participation rate if not required;

Supplementary value: identify additional strengths, weaknesses, and priorities; value of student/alumni engagement in assessment and generating ideas for improvement

Can elicit examples of competency-specific learning linked to particular learning experiences.

Honors, Awards, Fellowships, etc.

Limitations: uncertainty about criteria applied; not systematic across cohorts; difficult to link to learning during program

Supplementary value: illustrates student/graduate potential & accomplishments

Strategies w. Elements of **BOTH** Direct and Indirect Measures

Internship, Community Fieldwork Partners, and Supervisor Feedback

- grounded in student work
- additional perspectives
- *Can elicit competency-specific feedback*
- *Opportunity for input into curriculum development priorities*

Student Portfolios with Reflections

- grounded in student assignments, projects, and other learning experiences
- student reflections convey self-reported learning outcomes and prioritized goals
- *Can code and analyze for aggregate assessment*
- *Leverage for student career and program marketing opportunities*

Case Studies of Critical Learning Experiences

Types of Metrics

Units of observation and analysis:

- Individuals and groups
- Aggregate for cohorts and cohort comparisons
- Disaggregate for sub-groups and sub-group comparisons – *e.g. minoritized identities, prior work experience, etc.*

Levels/Thresholds:

- Central tendencies (e.g. mean, median)
- % distribution across Likert scale

Yardsticks: benchmarks and targets

- e.g. 75% will achieve highest ratings by target date
- Increase ratings by 10% over 3 year period
- Close gap between sub-groups

Qualitative descriptions and characterizations with illustrations

Tufts University's Urban & Environmental Policy & Planning SLO Assessment Journey

Are UEP students learning what we think we're teaching?

A story of our how we developed our assessment strategy and the discussions it inspired....

Our Strategy: Use the feedback on assignments for our SLO assessment.

(Intended as an example of an SLO assessment design process rather than a model for what your program should do.)



“Competency Map” to Identify Key SLOs for Core Courses

UEP competencies	UEP250	UEP251	UEP252	UEP254	UEP255	PAB new criteria
	<i>Foundation</i>	<i>ECON</i>	<i>Cities</i>	<i>QUANT</i>	<i>Project</i>	
Knowledge						General planning knowledge
1 History, structure, and function of urban and metropolitan settlements			C			Human Settlements and History of Planning 4A1d
2 Economic influences on policy and planning (e.g. 'market' and 'polis' relationships)	C	C	C		C	Growth and Development 4A3d
3 Environmental, social, and cultural influences on policy and planning	C		C			Sustainability and Environmental Quality 4A3c
	C	C	C		C	Growth and Development 4A3d
4 Different roles of government, governance, and citizenship in policy and planning	C		C			Governance and Participation 4A3b
5 History, theory, and processes of both policy making and planning together with implementation procedures and practices	C		C		C	Purpose and Meaning of Planning 4A1a
	C					Planning Theory 4A1b
	C		C			Human Settlements and History of Planning 4A1d
	C				C	Plan Creation and Implementation 4A2d
6 Evaluation of policy and planning						
7 Administrative, legal, and political aspects of policy and plan-making	PC					Planning Law 4A1c
		C		C	C	The Future 4A1e

First Attempt in One Core Course ...

Sharpened desired learning outcomes

Focused on 2 assignments

Developed 12 sets of criteria

Rubric for assessing assignments

System for reporting and tracking...

UEP 252 *Cities in Space Place and Time*

Introduces students to the history and theory of cities and metropolitan regions focusing specifically on the actions of planners and policy-makers and how these actions shape our communities, neighborhoods, cities, regions, and world.

Step 1: Review the Course Competencies

PAB/UEP Competency	How we do this in UEP 252 Cities
1. General planning knowledge: The comprehension, representation, and use of ideas and information in the planning field, including appropriate perspectives from history, social science, and the design professions	
a) Purpose and Meaning of Planning: appreciation of why planning is undertaken by communities, cities, regions, and nations, and the impact planning is expected to have.	We look at how the growth of cities and metropolitan areas created new challenges, problems, and opportunities in the context of longer-term changes and trends; and how advocates responded, especially in calling for government/policy/planning actions and roles
b) Planning Theory: appreciation of the behaviors and structures available to bring about sound planning outcomes. <i>*History, theory, and processes of both policy making and planning together with implementation procedures and practices</i>	In looking at reponses (above), students will sort out the framing (theories/models) behind proposed solutions, alternatives, and favored approaches, and how this framing changed or did not change over time.

PAB competencies in regular font; *UEP competencies in italics.*

The problem...

- We think the course is well-designed to “instill” the competencies in students
 - But do we know if they are learning?
 - Previous assignment assessment focused more on whether they can write a good paper or not
-

Revised Assignments: Highlight Competencies/Learning Objectives

Drew on Bloom's taxonomy of learning actions:*

Describe – from author's perspective, learn content

Relate – make connections to historical and spatial context

Reflect – reflect on code of ethics and apply to future professional practice

* ["Bloom's Taxonomy of Measurable Verbs"](#) from the National Institute for Learning Outcomes.

Rubric (drawing on the [AAC&U's VALUE Rubrics project](#))

Cities Fall 2016 Post 1950 Plan/Policy Report - Assessment Rubric

Component and weight	Mastery Achieved: 90-100% of points are earned when:	Proficiency achieved: 80% of points are earned when:	Proficiency partially achieved: 70% of points are earned when:	Not proficient: 60% or less of points are earned when:
<u>Describe from the author's perspective</u> (40%)	<p>You convey the author's perspective on the issues being addressed, including how he/she framed the issue and its root and immediate causes, the public interest as the author sees it, the proposed reforms or policies, and the expected short and long-term consequences.</p> <p>Your narrative gives the reader a clear and empathetic understanding of the author's thinking and justifications, and of how the author relates his/her work to the wider context (spatial, historical, political, economic, legal, social).</p>	<p>You clearly describe the issue as the author(s) saw it, you describe the policies they proposed, and you explain why they proposed them. You identify the ways in which the author(s) framed the public interest, as well as the expected benefits.</p> <p>But reading your paper doesn't give the reader a clear understanding of how the author situates his/her proposals in the wider context.</p>	<p>You describe the immediate issues the author is addressing, why they saw these as issues needing to be addressed, and some proposed solutions.</p> <p>From reading your paper, however, we don't know how the author framed the public interest nor what he/she viewed as the expected benefits. Nor do we have a clear or empathetic understanding of the author's point of view and how he/she connected the proposed reforms to the larger context.</p>	<p>You describe what the author proposes and you give a few reasons why they are proposing that idea.</p> <p>You don't provide a clear idea of how the author frames the problems, nor how the proposals are expected to solve these or address the public interest. From reading your paper, we don't have a clear understanding of the author's point of view and how he/she relates it to the wider context.</p>
<u>Relate your document to its larger context beyond what the authors conveyed</u> (15%)	<p>You use your knowledge, including that gained from class readings and lectures, to relate the document to its historical and spatial context, especially in ways that the author(s) either couldn't have known about, failed to see, or purposely ignored. <u>You (and the authors) now have a wider understanding of urban policy and planning history to draw on, so we expect you to discuss that.</u></p> <p>You discuss in a more neutral way what actually happened (to the extent that you can find this out), what "blindness" the author(s) may have had, tensions that may have been in play, and national/global events and trends that may have been beyond the author(s) ability to anticipate, understand or take into account.</p>	<p>You relate the document to its historical and spatial context and discuss what the author(s) might not have known about or ignored or preferred not to address, bringing in class readings and lectures.</p> <p>While you describe what happened or didn't happen as a result of the document's proposals, you don't provide an account of the tensions and events that may have influenced outcomes.</p>	<p>You describe what you know of the historical and spatial context for your document, and talk about a few things the authors couldn't have known about.</p> <p>You don't discuss how events and trends may have influenced the issues the author is addressing, and your links to class readings and discussions are not explained clearly.</p>	<p>You list a few trends and events related to the issues discussed in your document</p> <p>You don't attempt to consider what the author(s) could have known or anticipated, nor the tensions they faced. You fail to make connections to our class readings and discussions.</p>

Example of rubric returned to student

Cities Fall 2015 - Assignment 1 - Post 1950 Plan/Policy Report - Assessment Rubric

Name:

Component and weight	A range: 90-100% of points are earned when:	B range: 80% of points are earned when:	C range: 70% of points are earned when:	Below C: 60% or less of points are earned when:	Comments	27.615	1	92.05%
						Points	Weight (do not edit)	Do not edit this column
Describe from the author's perspective (40%)	<p>You convey the author's perspective on the issues being addressed, including how he/she framed the issue and its root and immediate causes, the public interest as the author sees it, the proposed reforms or policies, and the expected short and long-term consequences.</p> <p>Your narrative gives the reader a clear and empathetic understanding of the author's thinking and justifications, and of how the author relates his/her work to the wider context (spatial, historical, political, economic, legal, social).</p>	<p>You clearly describe the issue as the author(s) saw it, you describe the policies they proposed, and you explain why they proposed them. You identify the ways in which the author(s) framed the public interest, as well as the expected benefits.</p> <p>But reading your paper doesn't give the reader a clear understanding of how the author situates his/her proposals in the wider context.</p>	<p>You describe the immediate issues the author is addressing, why they saw these as issues needing to be addressed, and some proposed solutions.</p> <p>From reading your paper, however, we don't know how the author framed the public interest nor what he/she viewed as the expected benefits. Nor do we have a clear or empathetic understanding of the author's point of view and how he/she connected the proposed reforms to the larger context.</p>	<p>You describe what the author proposes and you give a few reasons why they are proposing that idea.</p> <p>You don't provide a clear idea of how the author frames the problems, nor how the proposals are expected to solve these or address the public interest. From reading your paper, we don't have a clear understanding of the author's point of view and how he/she relates it to the wider context.</p>	<p>Be sure to explain who the authors are</p>	9.5	40%	3.8
Relate your document to its larger context beyond what the authors conveyed (15%)	<p>You use your knowledge, including that gained from class readings and lectures, to relate the document to its historical and spatial context, especially in ways that the author(s) either couldn't have known about, failed to see, or purposely ignored. <u>You (and the authors) now have a wider understanding of urban policy and planning history to draw on, so we expect you to discuss that.</u></p> <p>You discuss in a more neutral way what actually happened (to the extent that you can find this out), what "blindness" the author(s) may have had, tensions that may have been in play, and national/global events and trends that may have been beyond the author(s) ability to anticipate, understand or take into account.</p>	<p>You relate the document to its historical and spatial context and discuss what the author(s) might not have known about or ignored or preferred not to address, bringing in class readings and lectures.</p> <p>While you describe what happened or didn't happen as a result of the document's proposals, you don't provide an account of the tensions and events that may have influenced outcomes.</p>	<p>You describe what you know of the historical and spatial context for your document, and talk about a few things the authors couldn't have known about.</p> <p>You don't discuss how events and trends may have influenced the issues the author is addressing, and your links to class readings and discussions are not explained clearly.</p>	<p>You list a few trends and events related to the issues discussed in your document</p> <p>You don't attempt to consider what the author(s) could have known or anticipated, nor the tensions they faced. You fail to make connections our class readings and discussions.</p>	<p>You provide context but you don't describe the larger historical context, e.g., suburbanization and concentration of poverty in inner cities.</p>	8.5	15%	1.275

Clusters of Relevant Competencies

Cities Assignment Rubric

Competencies covered	Component and weight	A range: 90-100% of points are earned when:	B range: 80% of points are earned when:
1A, B, C, D, F 2A 3A, B, C, D	<u>Describe</u> from the author's perspective (40%)	<p>You convey the author's perspective on the issues being addressed, including how he/she framed the issue and its root and immediate causes, the public interest as the author sees it, the proposed reforms or policies, and the expected short and long-term consequences.</p> <p>Your narrative gives the reader a clear and empathetic understanding of the author's thinking and justifications, and of how the author relates his/her work to the wider context (spatial, historical, political, economic, legal, social).</p>	<p>You clearly describe the issue as the author(s) saw it, you describe the policies they proposed, and you explain why they proposed them. You identify the ways in which the author(s) framed the public interest, as well as the expected benefits.</p> <p>But reading your paper doesn't give the reader a clear understanding of how the author situates his/her proposals in the wider context.</p>

Benefits & Drawbacks

Barbara's Gleanings: “Gut response: We know what they know! We enjoyed reading their papers! And they seem to know what they know...”

Challenge of reporting and analyzing learning outcomes for *each* competency.

Competency Aligned Rubric & LMS: (UEP 250) Foundations of Public Policy & Planning:

- Similar process: competencies → criteria in a rubric
- Two assignments; Draft and Final
- More distinct delineation of each competency
- Easier to record, aggregate, and compare – across assignments, overtime, other courses
- Use of Learning Management System (Canvas)

Draft Debate Critique Essay Rubric

Student Name: _____

Criteria		Ratings			
1	Articulation of the Central Argument of the Debate Articulation of the argument that is central to the debate and why it is contestable and significant. (Your debate may involve more than one argument.)	Exemplary You clearly and concisely articulate the argument/s and explain why it is (or they are) contestable and significant.	Competent You clearly and concisely articulate the argument/s and explain why it is (or they are) contestable and significant, yet not as clearly or concisely as you might have.	Partly Competent You've articulated the argument/s yet your explanation of why it is (or they are) contestable and/or significant is not clear.	Not Yet Competent You did not articulate a contestable argument.
2	Situating the Debate in the Broader Discourse Situation of the debate in relation to the broader discourse, with attention to accepted understanding of the problems (their pervasiveness and causes) and why they are significant and widely-established ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.).	Exemplary You situate your topic in the broader discourse and astutely and succinctly describe the accepted understanding of the problem (pervasiveness and causes) and/or <u>widely-established</u> ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.).	Competent You situate your topic in the broader discourse and describe the accepted understanding of the problem (pervasiveness and causes) and/or <u>widely-established</u> ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.) yet your discussion could be more succinct or more nuanced.	Partly Competent Your discussion of the broader discourse in which your debate is situated is missing attention to either the accepted understanding of the problem (pervasiveness and causes) or <u>widely-established</u> ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.).	Not Yet Competent Your discussion of the broader discourse in which your debate is situated is overly general and lacks attention to the accepted understanding of the problem (pervasiveness and causes) and/or <u>widely-established</u> ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.).
3	Reasons and Underlying Assumptions Explanation of the reasons that -- explicitly or implicitly -- support the argument/s with attention to the underlying assumptions.	Exemplary You clearly identify reasons offered to support the argument/s and/or acknowledge the underlying assumptions guiding the authors' analysis.	Competent You identify reasons offered to support the argument/s yet your attention to the underlying assumptions guiding the authors' analysis could be more clear.	Partly Competent You identify reasons offered to support the argument/s yet you gloss over the key underlying assumptions guiding the authors' analysis.	Not Yet Competent You have not identified reasons to support the argument/s and/or you have not discussed underlying assumptions that guide the authors' analysis.

SpeedGrader in Canvas (Learning Management System)

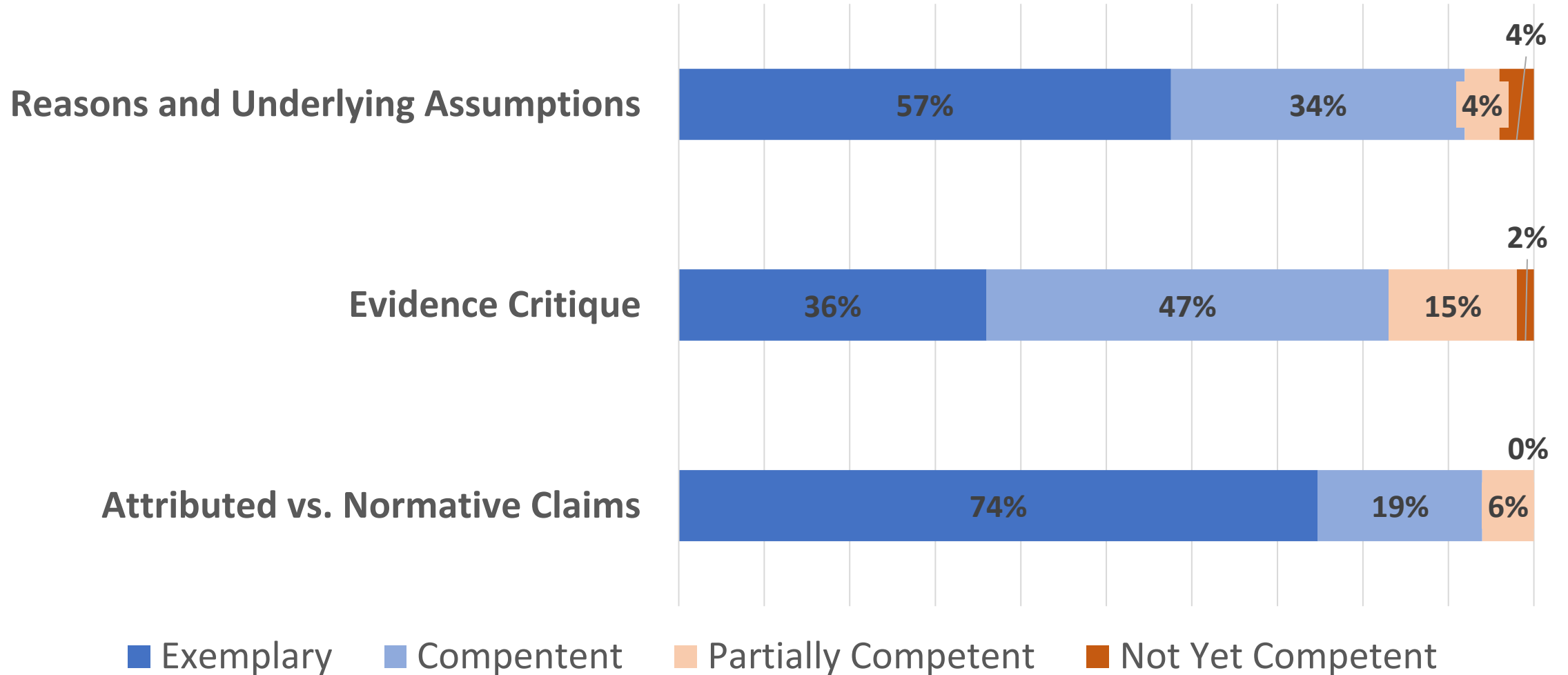
For each criterion:

- Click on the rating
- Add a comment for more specific comments, as necessary

Debate Critique Essay 2021				
Criteria	Ratings			
Articulation of the Central Argument of the Debate view longer description	Exemplary You clearly and concisely articulate the argument/s and explain why it is (or they are) contestable and significant.	Competent You clearly and concisely articulate the argument/s and explain why it is (or they are) contestable and significant, yet not as clearly or concisely as you might have.	Partly Competent You've articulated the argument/s yet your explanation of why it is (or they are) contestable and/or significant is not clear.	Not Yet Competent You did not articulate a contestable argument.
	This is a fabulous start. I think the framing you have at the bottom of page 5 articulates the argument you seek to assess based on the research.			
Situating the Debate in the Broader Discourse view longer description	Exemplary You situate your topic in the broader discourse and astutely and succinctly describe the accepted understanding of the problem (pervasiveness and causes) and/or widely-established ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.)	Competent You situate your topic in the broader discourse and describe the accepted understanding of the problem (pervasiveness and causes) and/or widely-established ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.) yet your discussion could be more succinct or more nuanced.	Partly Competent Your discussion of the broader discourse in which your debate is situated is missing attention to either the accepted understanding of the problem (pervasiveness and causes) and/or widely-established ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.).	Not Yet Competent Your discussion of the broader discourse in which your debate is situated is overly general and lacks attention to the accepted understanding of the problem (pervasiveness and causes) and/or widely-established ideas about solutions to the problems (e.g., effectiveness, efficiency, equity, etc.).

Aggregate Scores by Competency:

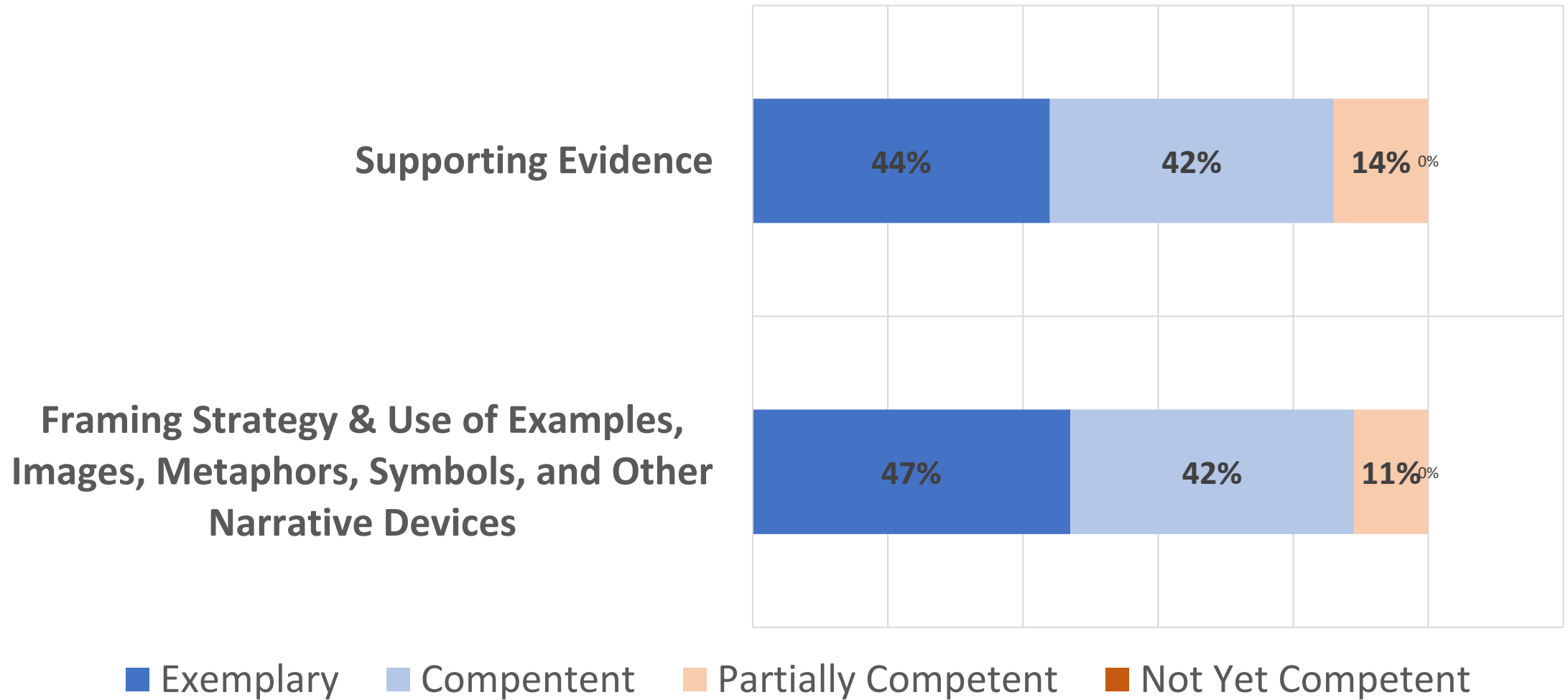
Critical Reasoning: Debate Critique Essays (2021)



These slides are excerpted from a presentation at a UEP faculty meeting that informed discussion about curriculum revisions.

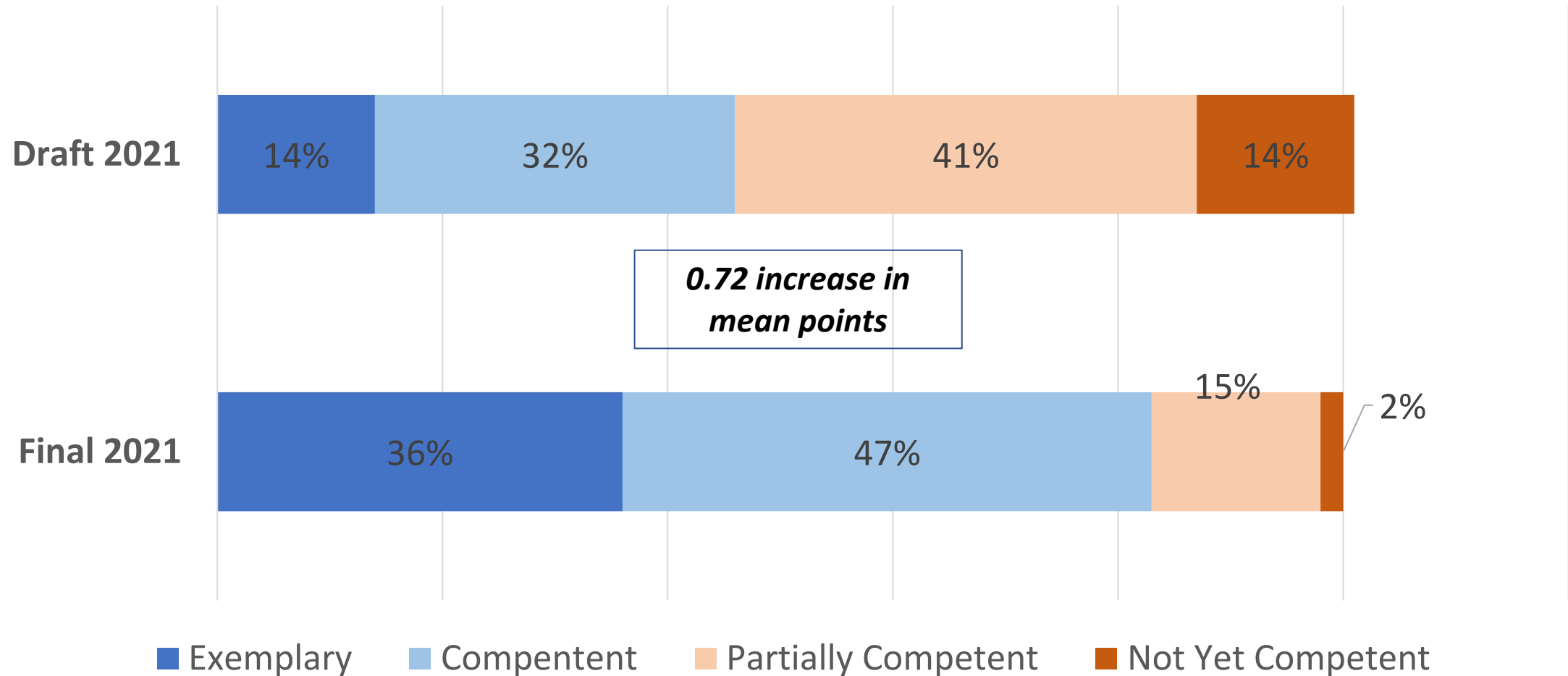
Different aspects of competencies in different assignments

Persuasion Strategies -- Policy/Planning Brief 2021



* Based on 73% of assignments for which data is available.

Capture Learning Progress: *Evidence Critique: Draft vs. Final Debate Critique Drafts (2021)*



Using Assessment to Improve Assignments & Teaching

DEFICIENCY

Cities

Critiquing without describing and explaining

Foundations

Analysis of Assumptions and Evidence

Writing skills

IMPROVEMENT

Clearer guidance in assignments to describe and explain differences in perspectives and context

Class activities to practice describing with clarity and understanding vs. sharing own opinions

New Argument Critique Assignment

Mandatory Writing Center Consultations

Using Assessment to Improve Curriculum

- **Core Course Focus:**
 - Global dimensions of planning moved from Cities to Foundations
- **New Course:**
 - Thesis design course to further develop research design skills
- **Align learning across core courses:**
 - Discussions with students and faculty about common themes – e.g. inter-subjectivity in Cities and Foundations
 - *Track development of critical thinking and written communication across courses and thesis/capstone exam (Aspiration!)*

Exam Questions as SLO Measurements

UEP 251 Economics for Planning & Policy Analysis

- Exam questions for each competency
- Mean scores and % for 4 levels
- Aggregate scores for multiple questions for each competency

Assessment of Student Learning Outcomes: (UEP 251) Economics for Policy and Planning Spring 2017 (M.A. only)

This assessment is based on composites of multiple choice, short answer, and essay exam questions on mid-term and final exams.

PAB Criteria & Specific competency	Topics covered within this competency:	Median correct	Mastery Achieved: 90-100%	Proficiency Achieved: 80-89%	Proficiency Partially Achieved: 70-79%	Not Proficient: <70%
% of students at each level						
4A3e: Growth and Development (Economic influences on policy and planning)						
Role of markets and market power	Introduction to microeconomic analysis and the neoclassical model, comparisons to alternative concepts of value pluralism; market supply and demand, price elasticity, market equilibrium (short and long run), market shortage and surplus; efficiency vs equity; market concentration, market failure, and market types, including perfect competition, monopolies, and natural monopolies.	Exam 1 80% Exam 2 92%	Exam 1: 24% Exam 2: 67%	Exam 1: 4% Exam 2: 7%	Exam 1: 48% Exam 2: 7%	Exam 1: 24% Exam 2: 19%
Consumer and producer economic theory	Principles of neoclassical utility theory, indifference curves, budget constraints, and consumer equilibrium; price discrimination; economic measures of social welfare, including consumer and producer surplus and deadweight losses; producer cost, revenue, and profits; producer output and pricing decisions; economies of scale and optimal firm size.	Exam 1: 87%	36%	44%	20%	0%
4A3d: Sustainability and Environmental Quality (Environmental, social, and cultural influences on policy and planning)						
Environmental economics	Externalities, environmental damage, and related market failures; public goods and common property resources; role of government in market failures (provision of public goods, taxation, regulation, property rights enforcement, etc.); non-market valuation strategies; cost-benefit and life cycle analysis, discounting and the discount rate.	Exam 2 72%	26%	22%	7%	44%
Urban economics	Economic rationale for the existence of cities; scale and agglomeration economies; monocentric and polycentric city models; transportation costs and public transportation.	Exam 2 95%	59%	15%	4%	22%
4A3c: Governance and Participation (Different roles of government, governance, and citizenship in policy and planning)						
Government taxation and regulation	Effect of taxes on market outcomes (price/quantity) and welfare (consumer/producer surplus); distributional consequences of taxation; price elasticity, tax revenue and tax burden.	Exam 2 78%	4%	44%	30%	22%
4A3b: Equity, Diversity, Social Justice (UEP competency: Political and economic power mapping)						
Inequality and Gini coefficients	Trends in income inequality and income redistribution efforts; Lorenz curves and Gini coefficients; normative standards of equity; spatial concentrations of poverty and inequality.	Exam 2 94%	56%	15%	15%	15%

An excerpt from a rubric with additional learning outcomes.

Group-Level Metrics -- UEP 255 Field Projects, a planning studio

- Assessment by faculty and TAs and student team members
- Informed by community partner feedback
- Compute fraction of teams at each of 4 levels of proficiency for each competency

Greater Boston Community Land Trust Network 2017 (Loh)								
		GBCLTN	Mastery Achieved	Proficiency achieved	Proficiency partially achieved	Not proficient	Comments	
PAB2D, 2E	Collaborative Skills: project management	3	Plan is developed with realistic scope of work, detailed tasks, timeline, and person responsible.	Plan is developed lacking only 1 of following: realistic scope of work, detailed tasks, timeline, and person responsible.	Plan is developed lacking 2 of following: realistic scope of work, detailed tasks, timeline, and person responsible.	Plan is not well developed, and lacks a realistic scope of work, detailed tasks, timeline, and person responsible		
		2	Division of labor among team is equitable and makes best use of member strengths and interests.	Division of labor among team is equitable and makes moderate use of member strengths and interests.	Division of labor among team is inequitable and makes moderate use of member strengths and interests.	Division of labor among team is inequitable and makes poor use of member strengths and interests.	A lot was on Allison's shoulders initially. Seemed like Allison and Stefan took on more overall.	
		3	Team monitors progress regularly and makes timely adjustments most of the time.	Team monitors progress regularly and makes timely adjustments some of the time.	Team monitors progress irregularly and makes timely adjustments some of the time.	Team monitors progress irregularly and does not make timely adjustments most of the time.		
		4	Team completes all deliverables and meets deadlines all of the time.	Team completes all deliverables and meets deadlines most of the time.	Team completes most deliverables and meets deadlines some of the time.	Team completes some deliverables and meets deadlines some of the time.		
PAB2E	Collaborative skills: communication and relationship-building	2	Communication within team is timely, succinct, complete, and clear all of the time.	Communication within team is timely, succinct, complete, and clear most of the time.	Communication within team is timely, succinct, complete, and clear some of the time.	Communication within team is rarely timely, succinct, complete, and clear.		
		4	Communication between	Communication between	Communication between	Communication between		

An excerpt from a more extensive spreadsheet with additional learning outcomes – completed for each team

Assessment of Student Learning Outcomes: (UEP 255) Field Projects: Planning and Practice, Spring 2017

This assessment draws on the written work, oral presentations, self- and team- assessment reports, and faculty observations of individual students and teams.

The learning outcomes highlighted are those our alumni have told us are among the most critical to successful practice in their policy and planning careers. The

table reports on ratings at the team level for each of the eight teams.

PAB Criterion	Explanation of learning assessed	Mastery Achieved	Proficiency Achieved	Proficiency Partially Achieved	Not Proficient
		# teams/8 teams			
4A2d Plan Creation and Implementation and 4a2e Planning Process Methods					
Collaborative Skills: project management	Plan is developed with realistic scope of work, detailed tasks, timeline, and person responsible.	3/8	5/8	0	0
	Division of labor among team is equitable and makes best use of member strengths and interests.	4/8	1/8	2/8	1/8
	Team monitors progress regularly and makes timely adjustments.	4/8	4/8	0	0
	Team completes all deliverables and meets deadlines.	5/8	3/8	0	0
Collaborative Skills: communication and relationship building	Communication within team is timely, succinct, complete, and clear.	3/8	2/8	2/8	1/8
	Communication between team and partner is timely, succinct, and clear.	6/8	2/8	0	0
	Team takes time to check in as people with each other and with partner.	4/8	3/8	1/8	0
	Team provides appropriate, direct, and honest feedback (both positive and negative) to each other and to partner.	4/8	2/8	1/8	1/8
	Trust and working relationships between team members.	6/8	1/8	0	1/8
	Trust and working relationships between team and partner.	6/8	2/8	0	0
4A2f) Leadership and Management:					
Team problem solving: adapting to the unexpected and obstacles	Team members have deep understanding of each other’s strengths and challenges, including each other’s preferred style in managing unanticipated problems.	2/8	5/8	1/8	0
	Team always discusses, identifies, records, and plans for time availability and constraints of individual members.	6/8	2/8	0	0
	Team members are as flexible with their schedules as possible and assume additional duties as necessary when unanticipated demands arise.	3/8	4/8	1/8	0
	All potential solutions for unanticipated problems generated within the group are considered.	2/8	4/8	1/8	1/8

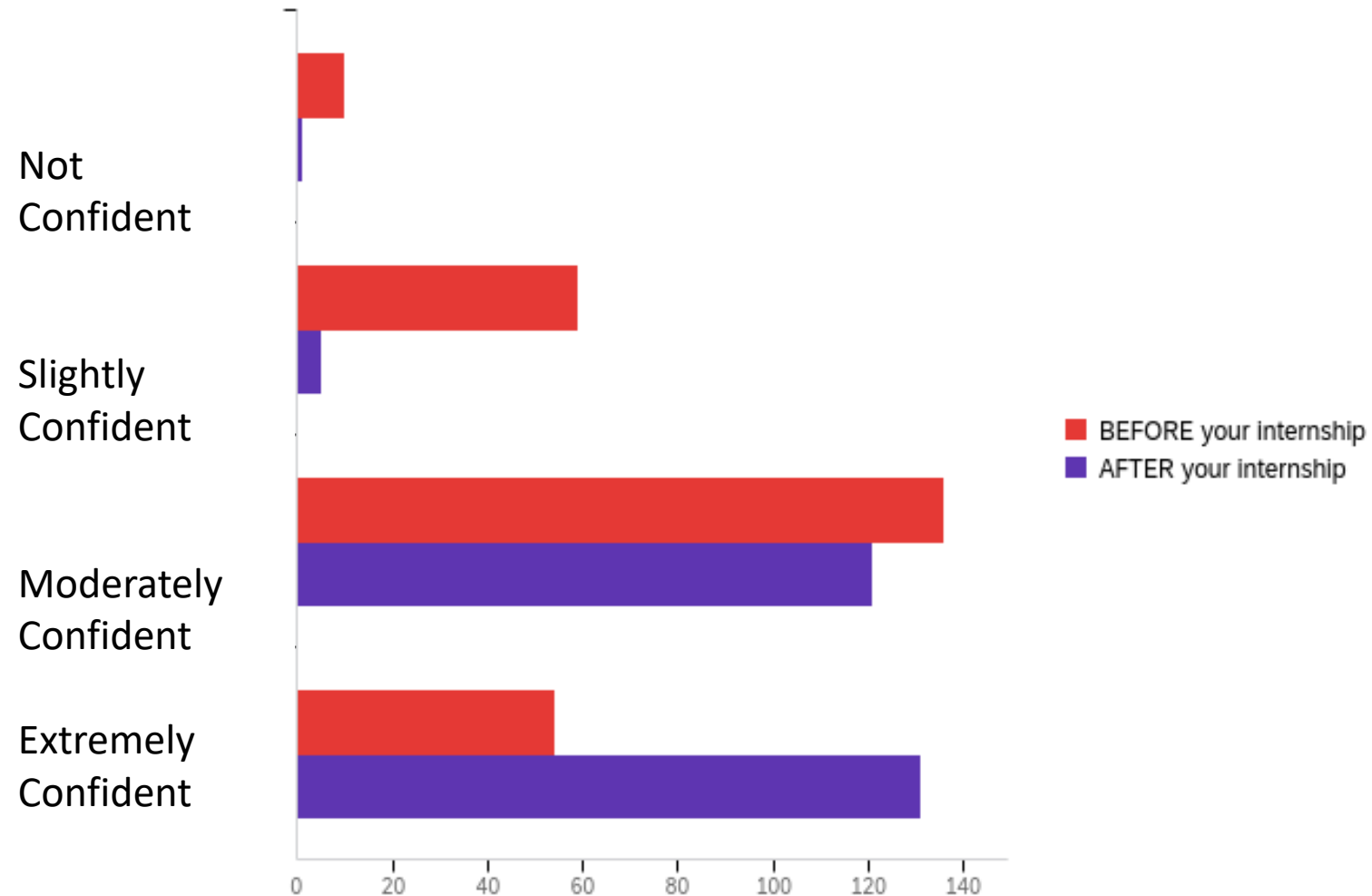
Surveys as SLO Measurement Mechanisms:

- Questions linked to relevant competencies
- Retrospective pre-post self-assessments
- Internship supervisors as external assessors

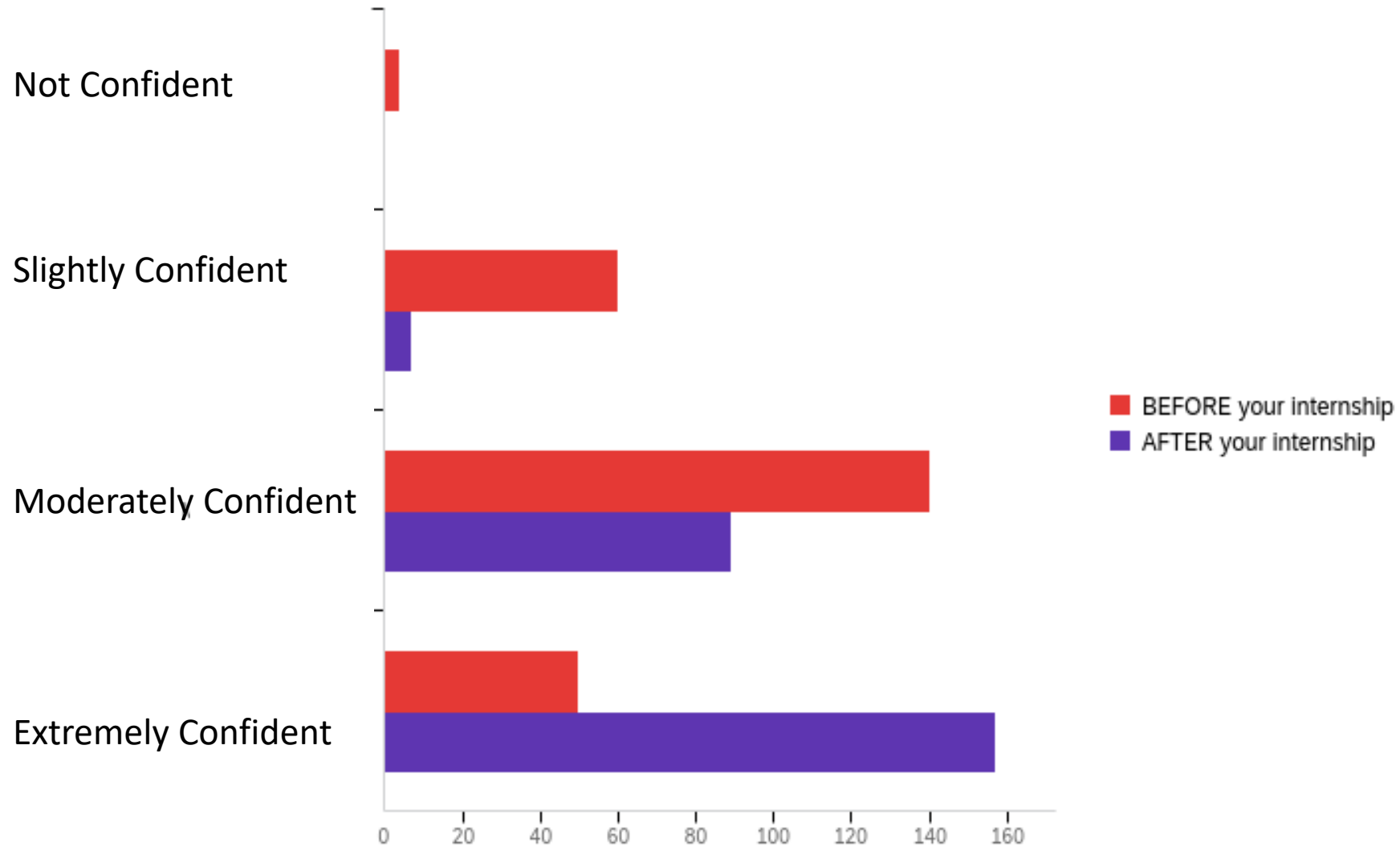
*These are **reported** learning outcomes, tied to the internship activities.*

Student's Internship Self-Assessment Surveys (2016-2022)

Effectively manage project tasks

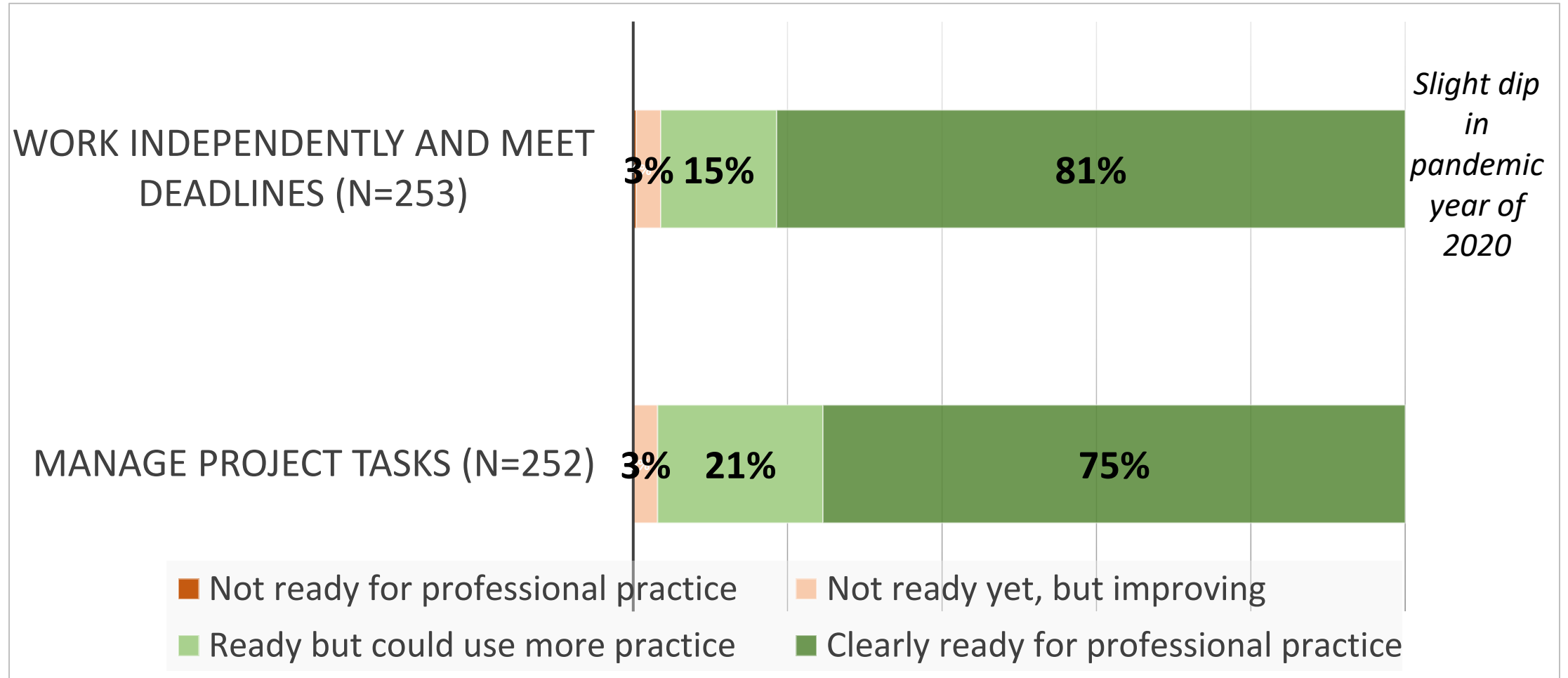


Collect and organize information and/or data



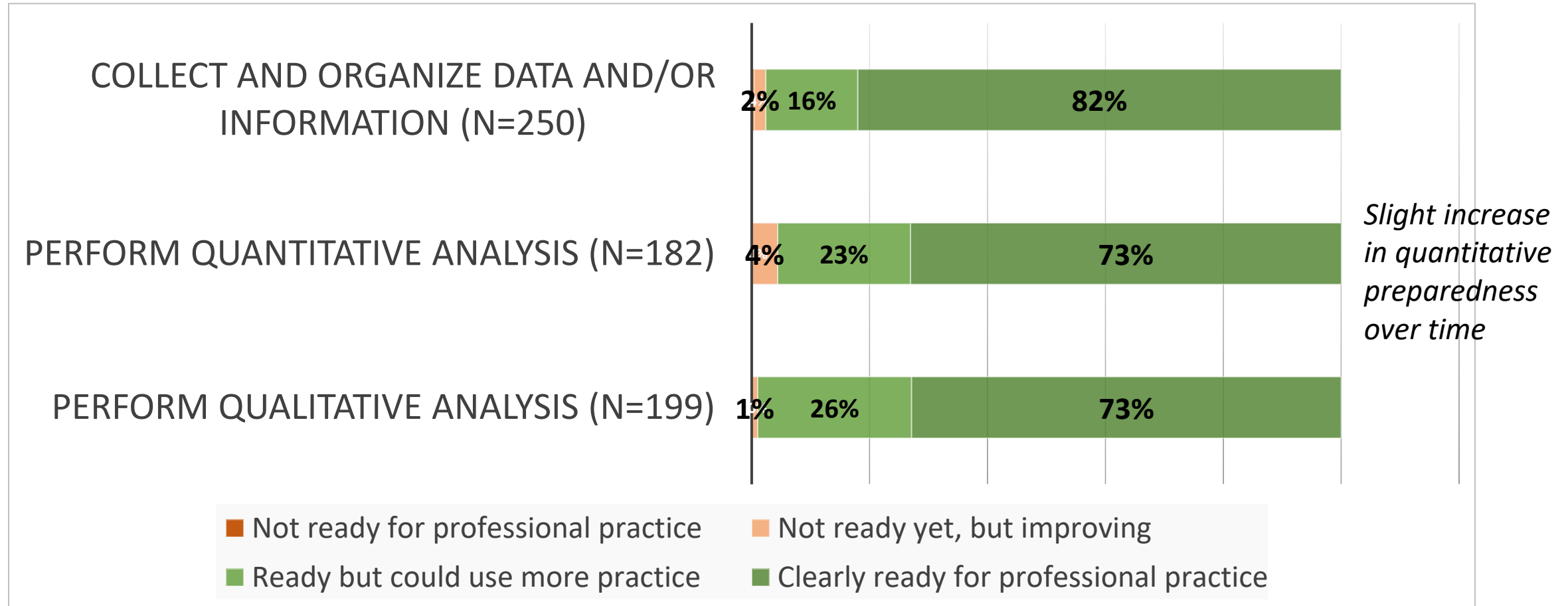
Internship Supervisor Surveys (2016-2022)

Project Management Competencies



Internship Supervisor Surveys (2016-2022)

Data Collection & Analysis



Exit Survey - Retrospective Pre-Post Self-Assessment

	BEFORE ENROLL- MENT	Gained Considerable Confidence	Gained Limited Confidence	Not Confident
KNOWLEDGE COMPETENCIES (Selected)				
Dynamics of race, class, and gender in policy and planning	24%	79%	18%	3%
History, structure, function of urban/metro settlements	15%	68%	26%	6%
Global dimensions of planning/policy	15%	48%	40%	12%
RESEARCH & COMMUNICATION SKILLS (Selected)				
Spatial analysis	18%	79%	15%	6%
Quantitative analysis	21%	76%	18%	6%
Critical thinking	76%	68%	32%	0%
Written, oral, and visual communication	74%	56%	44%	0%

Some examples from other planning programs

Comprehensive Exams

(communications with several programs)

Designed to assess core learning outcomes for ALL students

Types of questions: most multiple choice or short answers;

How design: most faculty of each course, some AICP prep materials

When administered:

- culmination of degree or mid-point as check point
- set times or by arrangement w. graduate advisor as proctor
- pre-post: beginning and end of program

Assessment: most pass/fail, 2-3 chances to pass

Univ. of Kansas has a two-day (weekend) test.
Students prepare a consultant's report guided by prompts designed by core faculty.
Evaluated by those faculty.

Pros and Cons of Comprehensive Exams

ADVANTAGES

Efficient to administer

Efficient to analyze (multiple choice, short answer)

Can identify gaps in curriculum

Facilitate pre-post analysis and tracing trends

DRAWBACKS & QUESTIONS

Agreeing on the questions

Updating questions: *changes in curriculum, instructor focus*

May emphasize recall vs. critical thinking, creativity (multiple choice, short answer)

Student Reflections

Student Reflections and Self-Assessment (e.g. Univ. of New Mexico)

- Mid-program self-assessment and discussion with faculty advisor
- Progress assessment at final capstone defense (professional project or thesis)

Case Studies of specific questions -- *an example from UEP's mid-career program.*

- **Question:** To what extent and in what ways are our students leveraging their work experience to deepen their learning?
- Content analysis of a sample of assignments
- Focus group to discuss benefits and ideas for deepening the learning

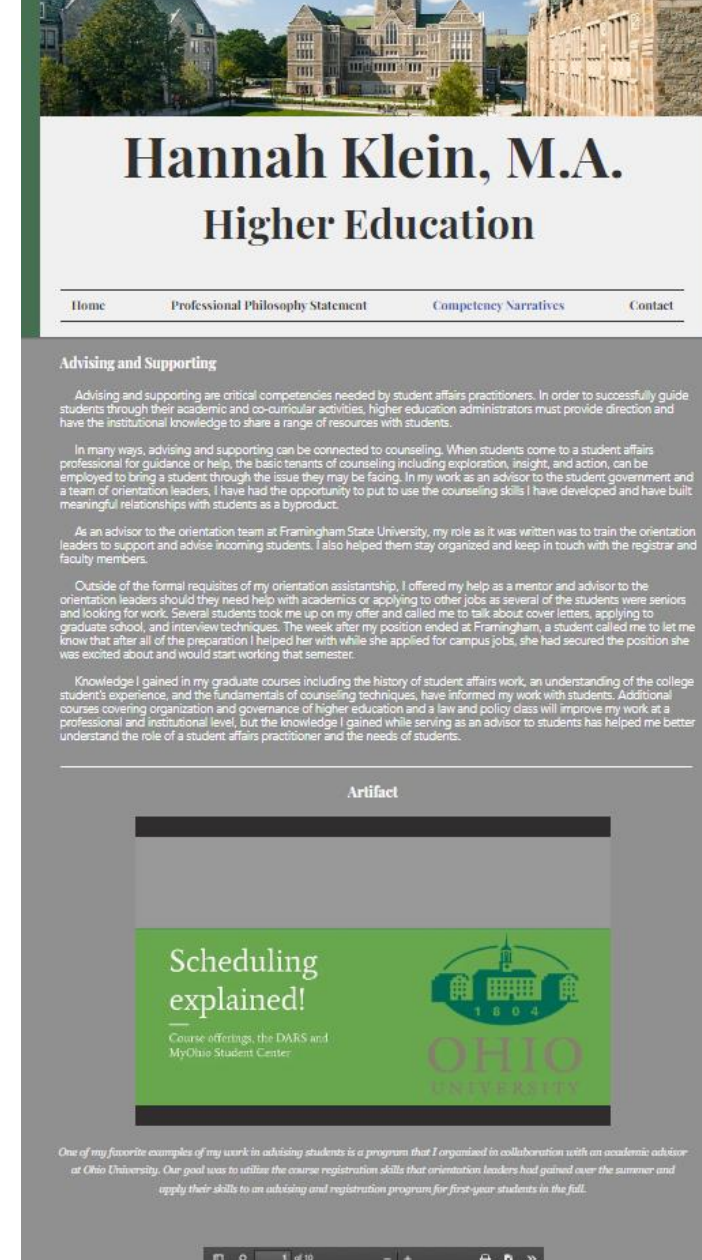
Student Portfolios

Portfolio (e.g. Florida Atlantic University)

- Reflections on graduate education and professional planning experiences:
 - Define specific learning outcomes: planning knowledge, skills, and values & ethics
- Demonstrate attainment of learning outcomes with discussion of evidence from capstone projects, course assignments, internship/work projects, etc.
- Faculty feedback on drafts and revisions
- Linked to final grade for culminating capstone course (Planning Project or Master's Thesis)

[Ann Forsyth's 2008 blog post](#) on planning portfolios in Planetizen.

E-Portfolio example from a Boston College M.A. in Higher Education student.
<https://hannahjuneklein.wixsite.com/portfolio/competency-narratives>



Assessment Challenges

CHALLENGE

SUGGESTIONS & QUESTIONS

Lack of Resources
(especially time!)

Link to assignments already assessing
Simplify, Prioritize, Sample (years, students)
Use Learning Management Systems

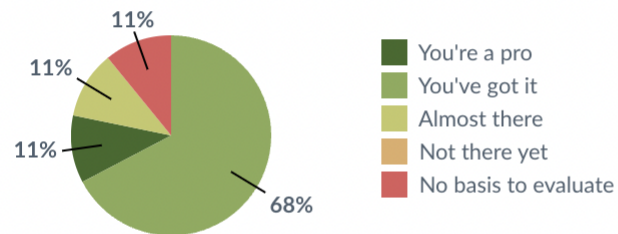
Reluctance or Resistance

Show the value for improvements,
program promotion
Opportunity to praise & encourage
Do it together; set regular times for it

Example of LMS generated aggregation

4A1e) The Future

Analyzes the potential influences of the planning document on issues and conditions over time leading to today, including influences on planning/policy practice.

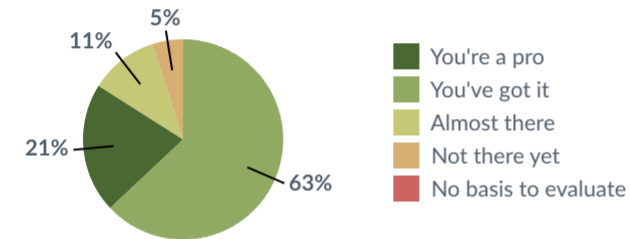


Mastery set at: 3

Calculation Method: Highest Score

4A2b) Written Communication

Uses clear and concise language and a compelling narrative structure to persuasively communicate meaning to the intended audience, using appropriate terminology and citations.

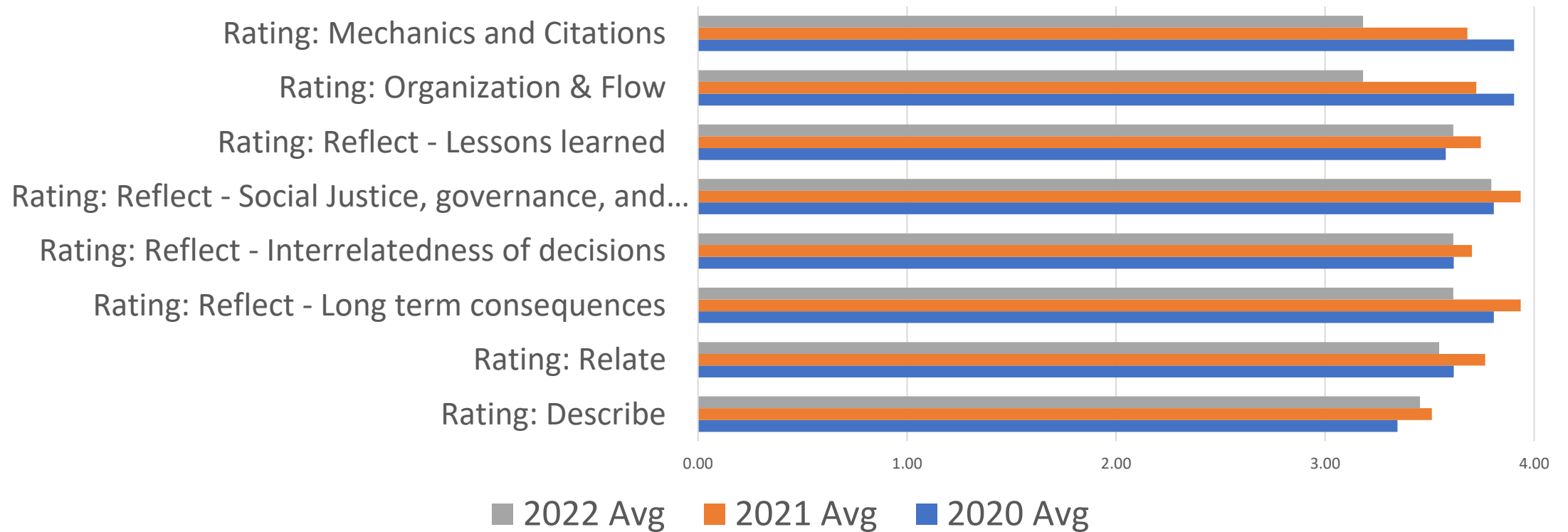


Mastery set at: 3

Calculation Method: Highest Score

LMS generated comparison across years

Policy / Plan Analysis Elements



Assessment Challenges

CHALLENGE

**Changes in
Assignments or
Faculty**

**Consistency across
cohorts, faculty,
courses** (for comparison,
tracking progress)

SUGGESTIONS & QUESTIONS

Apply same criteria to new assignments
Adapt assessment instruments to fit new
Record explanations of criteria & process to
pass along

Confer and adjust
Compare *findings*

Assessment Challenges

CHALLENGE

Lack Variation to track progress; compare subgroups

Attribution - our teaching vs. other factors

SUGGESTIONS & QUESTIONS

Refine criteria

Reserve highest rating for exemplary
? May reflect consistency!

Really hard to do!

Before and after comparisons (draft to final, pre- and post assessments)

Link to learning activities

Discuss implications of other factors

Planning Your SLO Design and Implementation

1. **Goal setting:** Which Student Learning Outcomes will you assess?
2. **Design the approach:**
 - Direct observation opportunities: class assignments, projects, etc.
 - Types of instruments: rubrics, surveys, self-assessment, portfolios ...
3. **Data Collection** (and who will do it)
4. **Data Analysis and Interpretation** (and stakeholder engagement)
5. **Plans for Using the Findings**

Ideas for assessing your priority SLOs

GoogleDoc IV

Choose one of your key student learning outcomes (IV on the google doc)

1. What class assignment/s, project/s, or other **activities** might you use for assessing that learning outcome?
2. What types of **measurement mechanisms or metrics** might you use in your assessment?

Small group discussion

In your group, focus on one or two student learning outcomes that are important to all.

- Discuss possible measurement mechanisms and metrics (from step III).
- What challenges of *collecting the data* do you anticipate? What suggestions do you have for contending with them?
- What challenges of *analyzing and interpreting* the data do you anticipate? What suggestions do you have for contending with them?
- Share ideas for using the assessment to improve curriculum or pedagogy in your program?

A guide & template for you and your colleagues

Planning a Student Learning Outcomes Assessment Design for Your Planning Program

Questions and a template to help you plan the next steps for your program.

Prepared by Laurie Goldman, Ph.D., Dept. of Urban & Environmental Policy & Planning, for the Planning Accreditation Board, October 21, 2023 at the ACSP Conference in Chicago.

A Few Useful Resources

Planning Accreditation Board resources on Student Learning Outcomes:

- [Noteworthy Student Learning Outcomes Assessment Practices](#)
- [Previous presentations and other resources on Outcomes Assessment](#)

[National Institute for Learning Outcomes](#)

The National Institute for Learning Outcomes Assessment (NILOA), established in 2008, is a research and resource-development organization, dedicated to documenting, advocating, and facilitating the systematic use of learning outcomes assessment to improve student learning.

Their searchable website aggregates relevant publications, case studies, and tools for learning outcomes assessment.

[VALUE Rubrics](#) –Valid Assessment of Learning in Undergraduate Education (VALUE) is a compendium of rubrics on a wide range of learning outcomes researched, designed, and assembled by the American Association of Colleges and Universities (AAC&U). *These rubrics can be adapted to graduate-level courses addressing planning-specific foci.*

Your input!

Please share your ideas, comments, and questions with Laurie Goldman, Ph.D. laurie.goldman@tufts.edu. She'll integrate your input into materials that will be shared with workshop participants and others pursuing Student Learning Outcomes Measurement for planning programs.