Critical & Integrative Thinking: Short Form

Washington State University **2009**

Work No._____ Rater Initials _____ Average Score ___

For each of the seven criteria below

a) **identify specific phrases on the accompanying longer form** which describe the work, and

b) **circle a numeric score** on the short form for each criteria. Notes:

- A score of 4 represents competency for a student graduating from WSU
- Assess by ***what is appropriate to the specific context/task***. Not all criteria / descriptors apply to every communication mode or assignment.

c) **average all the scores** and entering that number above, with your initials and paper no.

1. Issue Identification and Focus

0 - Absent	1 – Minimal	2 - Emerging	3 -Developing	4 –Competent	5 - Effective	6 - Mastering

This dimension focuses on identifying, focusing on and thoroughly exploring the issue and significant underlying or implicit issues, aspects, or relationships integral to effective analysis.

2. Context and Assumptions

0 - Absent	1 – Minimal	2 - Emerging	3 -Developing	4 –Competent	5 - Effective	6 - Mastering

This dimension focuses on the context, scope and assumptions connected to the issue, considering other integral contexts, background information, and the challenges regarding complexity and bias. Work demonstrates understanding of social, political, and ethical implications.

3. Sources and Evidence

0 - Absent	1 – Minimal	2 - Emerging	3 -Developing	4 –Competent	5 - Effective	6 - Mastering

This dimension focuses on search, selection, and source evaluation skills—including accuracy, relevance, and completeness. High scores effectively analyze and integrate multiple appropriate pieces of evidence, acknowledge biases, and distinguish correlations from causal relationships.

4. Diverse Perspectives

0 - Absent	1 – Minimal	2 - Emerging	3 -Developing	4 –Competent	5 - Effective	6 - Mastering

This dimension focuses on identifying and integrating diverse relevant perspectives, including contrary views and evidence.

5. Own Perspective

0 - Absent	1 – Minimal	2 - Emerging	3 -Developing	4 –Competent	5 - Effective	6 - Mastering

This dimension focuses on ownership of an issue, indicated by the justification and advancement of an original view or hypothesis, recognition of own bias, and skill at integrating multiple perspectives or interpretations.

6. Conclusion

0 - Absent	1 – Minimal	2 - Emerging	3 -Developing	4 –Competent	5 - Effective	6 - Mastering

This dimension focuses on integrating previous dimensions and identifying conclusions or consequences / pulling the work together, as a professional, ethical, and socially-responsible citizen. May provide future action, outcome, significance, issue summary or essence, overarching question.

7. Communication

0 - Absent	1 – Minimal	2 - Emerging	3 -Developing	4 –Competent	5 - Effective	6 - Mastering

This overarching meta-dimension focuses on intentional and purposeful strategies to communicate an identified purpose and message while managing relationships and affect with intended audiences, with particular resources and constraints. May include delivery/mode, media, activities, interactions, rhetorical moves, tone, style, language, and conventions.

Guide to Rating Critical & Integrative Thinking: Long Form

***Washington State University* 2009**

***Instructions**: For each of the seven criteria below:*

*a) **circle specific phrases** which describe the work, and writing comments*

*b) **circle a numeric score** for each criteria (or indicate a half point increment)*

Notes

- *A score of 4 represents competency for a student graduating from WSU.*
- *Assess by **what is appropriate to the context / task**; as needed / as appropriate are implicit in all descriptors. Similarly, not all criteria apply to every assignment or mode.*

1. Identifies and focuses (and appropriately reformulates) the issue, problem, question.

Absent	Minimal		Emerging		Developing		Competent		Effective		Mastering
0	1		2		3		4		5		6
ABSENT	Attempts with limited success to identify and summarize the issue; or does so superficially, incompletely, or inaccurately. Scope may be overly narrow or overbroad.				Identifies and focuses on the issue(s), though minor aspects may be inaccurate, confused, inappropriately weighted, or extraneous. Partially identifies related subsidiary issue(s). Some details or nuances are missing or glossed over.				Identifies, focuses and thoroughly explores the issue and significant underlying issues, aspects, or relationships. Captures the multi-faceted and dynamic nature, scope and elements of complex issue.		

Comments:

2. Identifies and considers the influence of context* and assumptions, including biases.

Absent	Minimal		Emerging		Developing		Competent		Effective		Mastering
0	1		2		3		4		5		6
ABSENT	Begins to consider context, or does so with partial success. Overall, little development of context. Approach to the issue may be egocentric or socio-centric. Most analysis is grounded in absolutes. Shows some basic awareness of own assumptions and/or assumptions that underlie the issue; may remain superficial.				Presents and explores relevant contexts regarding the issue. Considers and develops at least one aspect of context; some other aspects are marginally developed. Analysis includes some outside verification, but primarily relies on established sources. Acknowledges personal biases; may have some difficulty accepting other vantage points as legitimate. Provides some recognition of context and consideration of own assumptions and/or assumptions that underlie the issue, and of the implications of those assumptions.				Analyzes the issue with a clear sense of scope and multiple contexts. Considers other integral contexts and background information. Contextualizes multiple biases and values, giving each full weight and consideration, but may elect to choose one vantage while acknowledging complexity of issue. Identifies influence of context and questions assumptions, addressing ethical dimensions underlying the issue. Demon-strates understanding of social, political, and ethical implications.		

Comments:

Context may include:

Cultural / Historical: Group, national, ethnic, cross-cultural or other	**Ethical**: Values, impact on society, citizenry and democracy; equity, quality of life	**Political /Economic**: Organizational or governmental, trade, labor, business, power relations
Educational / Experience: School, training, personal experience Disciplinary / Multi-Disciplinary: theories, critiques, developments	**Sustainable / Global:** ability to meet longterm future needs; change and flexibity; resource allocation; global implications	**Scientific / Technical** : Conceptual, science, scientific method; applied science, engineering, medicine

3. Presents, assesses, and analyzes appropriate supporting data/evidence/sources.

Absent	Minimal		Emerging		Developing		Competent		Effective		Mastering
0		1		2		3		4		5	6
ABSENT	Search and selection are narrow, or loosely connected to information need.				Search and selection suggest sources were evaluated to meet the information need.				Evidence of search, selection, and source evaluation skills demonstrates notable identification of unique and salient resources.		
	Most data/evidence or sources are simplistic, or inappropriate / not related to topic. Does not diverge from traditional sources.				Appropriate evidence or sources provided, although exploration appears to have been routine; may include an innovative or nontraditional source or interpretation.				Information need is clearly defined and integrated to meet and exceed assignment. May explore and synthesize unconventional sources or interpretations.		
	Repeats information provided without question; or may dismiss evidence without adequate justification.				Use of evidence, qualified selective, and appropriate.				Examines evidence and its source; questions its accuracy, relevance, and completeness.		
	May consider knowledge as absolute, unassailable, confirmed by one or another authority.				Considers knowledge as relative collection of opinions and perspectives, and makes little attempt to compare.				Views knowledge as the best available evidence within the given context, even in the face of uncertainty and ambiguity.		
	Makes limited distinctions among fact, opinion, and value judgments.				Discerns fact from opinion and may recognize some bias in evidence, although may be limited.				Demonstrates understanding of how facts shape but may not confirm opinion. Recognizes bias, including selection bias.		
	Conflates cause and correlation; relationship between evidence and analysis may be unclear.				Distinguishes causality from correlation, though presentation may have minor flaws. Relationship between evidence and analysis is generally clear.				Correlations are distinct from causal relationships between and among ideas. Relationship between evidence and analysis is clear; subordination reflects, subordinated for importance and impact.		

Comments:

4. Integrates diverse relevant perspectives.

Absent	Minimal		Emerging		Developing		Competent		Effective		Mastering
0		1		2		3		4		5	6
ABSENT	Adopts a single perspective, with limited discussion of other perspectives. If more than one viewpoint is presented, alternatives are not integrated.				Begins to relate alternative views to qualify analysis. Multiple viewpoints are mentioned but not thoroughly discussed, explained or qualified.				Addresses other perspectives and additional diverse perspectives to qualify analysis. Multiple viewpoints are thoroughly discussed, explained and qualified.		
	Treats other positions superficially or misrepresents them. May not consider that other viewpoints and expertise are necessary.				Rough integration of multiple viewpoints and comparison of ideas or perspectives. Ideas are investigated and integrated, but in a limited way.				Fully integrated perspectives from variety of sources; any analogies are used effectively.		
	Engages ideas that are obvious or agreeable. Avoids challenging or discomforting ideas.				Engages challenging ideas tentatively or in ways that inflate conflict. May dismiss alternative views hastily.				Seeks out, weighs and effectively integrates diverse, uncomfortable or contrary views.		
	Minimal analysis. May treat other positions superficially or misrepresent them. Little integration of perspectives and little attention to others' views.				Analysis of other positions is thoughtful and mostly accurate. Acknowledges value of multiple perspectives.				Analysis of other positions is accurate, nuanced, and respectful.		
	Mostly uses one way of knowing.				Acknowledges and integrates different ways of knowing.				Integrates different disciplinary and epistemological ways of knowing.		
Comments:											

5. Develops, presents, and communicates <u>own</u> perspective, hypothesis or position.

Absent	Minimal		Emerging		Developing		Competent		Effective		Mastering
0		1		2		3		4		5	6
ABSENT	Position or hypothesis is unclear, simplistic, or includes little original thinking.				Perspective or hypothesis includes some original thinking that acknowledges, refutes, synthesizes or extends other assertions, although some aspects adopted or limited.				Perspective or hypothesis demonstrates ownership for constructing knowledge or framing original questions, integrating objective analysis and intuition.		
	Own position or hypothesis is minimally identified and/or justified. May not clarify the established position relative to own.				Presents and justifies own position or hypothesis, although gaps may exist. May not address other views, or does so superficially. Relationship to established positions is clear.				Clearly presents and justifies own position or hypothesis while qualifying or integrating contrary views or interpretations. May draw support from experience and information not available from assigned sources. Position or hypothesis demonstrates sophisticated, integrative thought.		
	Little or no risk-taking, lacks exploration.				May remain within "safe" or predictable parameters.				May explore ideas that stretch conventional parameters; includes innovative thinking, questioning or risk-taking.		
	Little evidence of reflection or self-assessment.				Some evidence of reflection and/or self-assessment				Evidence of significant reflection and self-assessment		
Comments:											

6. Identifies and assesses conclusions and consequences.

Absent	Minimal	Emerging	Developing	Competent	Effective	Mastering
0	1	2	3	4	5	6
ABSENT	Conclusion may be a simplistic summary; limited identification of conclusions, implications and consequences. Conclusion and implications may not align with previous dimensions. Minimal consideration of future action, significance, overarching question, or context. May present conclusions as absolute; may attribute conclusion to external authority. Limited or no concrete connections between conclusions, recommendations, and consequences.		Presents conclusions, recommendations, and potential consequences, though limited; generally align with previous dimensions. May give some indication of future action, outcome, significance, issue summary or essence, or overarching question, though limited. May present implications that impact other people or issues, or extend beyond a single discipline or issue. Presents conclusions as relative and only loosely related to consequences. Relates consequences to conclusions, though may be vague or overstated.		Identifies, discusses, and extends conclusions and/or consequences, integrating previous dimensions, as a professional, ethical, and socially-responsible citizen. May identify "lessons learned." May provide future action, outcome, significance, issue summary or essence, or overarching question. Considers context, assumptions, evidence, and/or feasiblity. Qualifies own assertions with balance. Conclusions are qualified as the best available evidence within the context. Develops consequences fully and connects them clearly to conclusions, considering ambiguities and raising questions.
Comments:						

7. Communicates effectively in one or more modes. (May include articles, posters, lectures, oral presentations, interviews, websites, consultations, discussions, demonstrations, performances, powerpoint, artwork, film, etc.)

Absent	Minimal	Emerging	Developing	Competent	Effective	Mastering
0	1	2	3	4	5	6
Conveys no purpose	Communication choices may: Convey little or unintended message, Produce unanticipated or detrimental affect (visceral impact, tone and credibility), Disregards or poorly manages rapport with audience (or participants) Does not adequately meet the needs of the situation; lacks preparation and/or flexibility. May: Not adequately identify why the issue is relevant to this audience; Overlook audience / participant interests, needs, or background.		Attempts, with some success, to: Convey a purpose and message, Create the desired affect (visceral impact, tone and credibility), Manage rapport with immediate audience / participants. Meets the general needs of the situation, with limits to preparation and/or flexibility. May: Identify why the issue is generally relevant. Anticipate some audience/participant interests, needs, or background.		Uses communication choices to effectively: Convey identified purpose and message, **and** Create the desired affect (visceral impact, tone and credibility), **and** Manage rapport with (multiple) intended audience(s) or participants. Meets the needs of the particular situation, both immediate and larger context; is well-prepared and flexible. May: Identify why the issue is relevant to this audience in context. Anticipate and build on audience/participant interests, needs, background, and expertise.

	Some choices of delivery, media, activities, rhetorical moves, tone, and style do not fit this audience or purpose; basics choices may seem haphazard or ineffective. Tied to prepared material; little adjustment in context.	Choose basic elements of delivery, media, activities, rhetorical moves, tone, and style to engage this audience; most elements, though not all, positively contribute. May partially adjust in context, though flexibility is limited.	Choose and adeptly adjust delivery, media, activities, rhetorical moves, tone, and style to effectively engage this audience; all elements used for impact and contribution.
	Cultural competencies attempts fall short. May seem unaware.	Apply cultural competencies, with varying success.	Apply cultural competencies effectively.
	Poor use of venue, time, or technology.	Makes adequate use of venue, time, and available technology, with minor exceptions.	Strategically uses venue, time, and available technology, managing constraints .
	Lacks clear organization of information, ideas, or activities; or is inconsistent.	Adequately organizes information, ideas, and activities.	Organizes information, ideas, and activities with smooth transitions.
	Uses language which obscures some ideas; some use of conventions, standards, and formatting seems unsuitable; shifts are confusing. Errors distract.	Uses language which communicates ideas; appropriately employs conventions, standards, and formatting. Occasional errors do not generally distract.	Uses language which clearly communicates ideas; makes effective use of conventions, standards, and formatting; shifts are purposeful. Few if any errors.

Comments:

What Can We Learn about Faculty Development?
Prizes and Surprises

Carol Rutz
Carleton College

Bill Condon
Washington State University

See also Condon, W.; Iverson, E.; Manduca, C., Rutz, C. &Willett, G. (2016) *Faculty Development and Student Learning: Assessing the Connections*. Boomington: Indiana University Press.

Research Question:
Can we follow the effects of faculty development into student work samples?

The literature on faculty development tracks what faculty do and learn—input—not whether better faculty outcomes improve students' learning—output.

WSU, Carleton College, and the Science Education Resource Center designed a mixed-methods study to seek evidence that professional development improves teaching in ways that can be detected in student work.

Posited: Educators improve their pedagogy through professional development programs, and the faculty outcomes promote more and/or better student learning.

Initial focus on:
- faculty learning,
- improved teaching skills, and
- student learning

Serendipity led us to focus on:

- Sites for faculty development
  - Formal
  - Intentional, self-directed efforts by faculty
  - Routine events—annual reviews, participation in accreditation, hiring processes, etc.
- Issues involving faculty status
- Spread of effect

WSU Participants

Low-Participating Faculty (3 or fewer events/year)	High-Participating Faculty (4 or more events/year)
28	140

Critical Thinking Project Participants	WAC Workshop Participants	Portfolio Raters	Low-Participating Faculty
50	50	40	28

Adjunct	Continuing, non-Tenure Track	Tenure Track
16	40	114

Figure 3.3.
Distribution of faculty participants at WSU

All participants provided:

- Syllabi and assignments for one course
- One set of student work samples from an assignment in that course
- One 30-45 minute interview about changes in teaching practices over time

In all cases, participation in faculty development resulted in changes in faculty practices that in turn produced increases in students' learning, as measured in students' work products.

	Low Participating (2.2 events)	High Participating (1-3 additional events)	High-Participating (more than 3 additional events)
Average CT scoring for assignments	2.8	3.7	4.2
Average CT scoring on student work samples	2.6	3.6	4.1

Table 6.3
WSU Critical-Thinking (CT) Average Ratings by Faculty Participation Rates

	Low Participating (2.2 events)	WAC Workshop participants	Portfolio raters
Average CT scoring for assignments	2.8	3.4	3.6
Average CT scoring on student work samples	2.6	3.3	3.3
	N=20 faculty N=50 student samples	N=35 faculty N=100 student samples	N=27 faculty N=100 student samples

Table 6.4.
Comparison of low and high participators other than CT participants

The Serendipity:
Faculty Status and Student Learning

We thought we were measuring the connections between faculty development and student learning—and we were—but we also measured the results of differences in faculty status on the outcomes of faculty development (and therefore on student learning).

No. of Participants	Home Dept/ Program	Avg. No. of Events/Year	Offered by Home Dept/ Program	Outside Home Dept/ Program
12	World Civ	12	10	2
10	Composition	23	18	5
4	Music	7	3	4
3	Education	8	5	3
2	Engineering	11	9	2
4	Vet Med	13	11	2
2	Pharmacy	9	5	4
3	DTC	18	16	2
2	Art History	9	4	5
2	Agriculture	11	9	2
3	Kinesiology	9	6	3
9	Other	8	5	3
56	**Total**	**11.5**	**8.4**	**3.1**

Table 4.1.
Attendance at Formal Faculty Development: Temporary Faculty: Average Number of Events per Academic Year

Tenure-line faculty attended fewer department- or program-sponsored events, primarily because they teach a different set of courses. Thus, some of the effect demonstrated in Table 6.5 results from the fact that more tenure-line faculty teach upper-division courses, while non-tenure track faculty teach more heavily in the lower division. In addition, while temporary and adjunct faculty attended at least eight events a year, and some--the English 101 teachers--as many as 20, no tenure-line faculty member reported more than eight. Still, the tenured faculty were far more willing to experiment with new assignments or techniques, since they did not have to worry about a temporary dip in course evaluations. Thus, for that set of high-participating faculty, the extra freedom to experiment results in higher critical-thinking scores for students.

	Adjunct (term-to-term)	Temporary (year-to-year)	Tenure-track
Average CT score for assignments	3.7	3.9	4.3
Average CT score for student work samples	3.4	4.1	4.4

Table 6.5.
WSU Critical-Thinking (CT) Average Ratings by Appointment Type

Complications and Implications

It is worth remembering that the year-to-year temporary faculty were equally qualified (i.e., Ph.D.-level teachers) and in many cases far more experienced in teaching than most of the tenure-track faculty. Overall, then, differentials in outcomes can be attributed more to conditions of employment than to initial qualifications or subsequent teaching experience. And since the temporary faculty participated far more heavily in faculty development, they actually held an advantage over tenure-line faculty in opportunities for faculty learning. One might expect that their assignments would rate higher on asking for critical thinking and that their students would score at least as high on that outcome. Not so.

Comparing interview comments from temporary faculty and tenure-track faculty further reveals the ways that appointment types influence classroom innovation (see Table 6.6, below). More faculty development focused directly on improving teaching and learning results in higher performances from students, no matter what kind of appointment the teacher held. Still, faculty status matters, not so much because of qualifications but because of job security. Faculty whose positions are secure more readily incorporate what they learn from faculty-development opportunities into their teaching practices, and that freedom to experiment adds up to more learning for students. Putting teaching and learning under this kind of microscope yields more than just the expected results; it also provides information that might help improve teaching and learning in other ways. In this case, institutions can address the status of temporary faculty. Clearly, greater appointment security--whether tenure-track lines or longer continuing appointments--results in higher learning for students.

Temporary Faculty	**Tenure-Track Faculty**
I go to a lot of workshops and meetings, and I'm always learning more about how to teach better	I probably attend 2-3 workshops of some kind each year. I think they are worthwhile because I put some of those ideas into practice.
If I'm going to try something new, I have to be pretty sure it'll work--or at least that it won't blow up in my face.	I like trying new techniques and assignments.
My annual reviews focus on my teaching evaluations, so I have to be careful to keep those up.	My department values my teaching, but I'm not sure the university really does.
I usually find someone who's tried stuff and talk with them about how to make it work before I put in on my syllabus.	I throw in a new assignment or two every so often, and if it works, I keep it. I'm always tinkering.

Table 6.6.
Interview comments from temporary and tenure-track faculty

While this sample did not allow for the comparison, further research might compare results from faculty on three-year (or longer) appointments and clinical faculty appointees with those from tenure-track faculty to see whether holding tenure is the key factor in these results, or whether other kinds of employment security would do just as well. Either way, robust faculty development, complete with well-designed evaluation, again yields more for the money, further justifying the expenditure.

All figures taken from *Faculty Development and Student Learning: Assessing the Connections*.

Read even more about it:

Willett, G. (2013). Beyond pedagogy: Community feeling, educational development and power in a U.S. liberal arts college. *Learning and Teaching: The International Journal of Higher Education in the Social Sciences (LATISS), 6*(1), 47-71.

Willett, G., Iverson, E. R., Rutz, C., & Manduca, C. A. (2014). Measures Matter: Evidence of faculty development effects on faculty and student learning. *Assessing Writing, 20*, 19-36.

Rutz, C., Condon, W., Iverson, E. R., Manduca, C.A., & Willett, G. (2012). Faculty development and student learning: What is the relationship? *Change*, 44(3): 42-47.

IUPUI Assessment Conference 2016
Aligning Outcomes, Assessment, and Faculty Development to Support Student Learning
Carol Rutz, Carleton College

Material presented in this handout, is adapted from Condon, Iverson, Manduca, Rutz, and Willett: *Faculty Development and Student Learning: Assessing the Connections*, Indiana University Press, 2016.

Features of Carleton's faculty development curriculum:

- Articulate course learning goals.
- Scaffold assignments in the course by staging assignments to build up to larger assignments and assigning drafts as part of the assignment.
- Help students pay attention to audience in writing and oral reports.
- Develop a rubric for evaluating student work.
- Encourage students to write multiple drafts and revise in response to feedback.
- Provide students with clear, helpful, and timely comments on their work.
- Provide students with exemplars.
- Incorporate peer review.
- Encourage help-seeking habits for all students (writing center, library, professors, staff, and peers).

WAC

- Analyze assignments for effectiveness.
- Make comments effective--focus on the larger/global issues in earlier drafts and then comment on the grammatical or other small errors in later versions.
- Teach students to write clear prose.
- Teach students to write with clear organization.
- Teach students to use appropriate diction.
- Teach students to use Standard English effectively.
- Teach students to understand writing as a process.
- Teach students how to apply forms of attribution and citation as appropriate.
- Teach students about academic honesty.
- Help students develop confidence in their writing.
- Help students to become self-aware and self-reflective writers.
- Help students develop their information literacy (research skills, citation, and documentation).

QR

- Institute a quantitative habit of mind for students.
- Help students implement quantitative methods correctly.
- Help students interpret and evaluate quantitative information thoughtfully.
- Help students communicate effectively with quantitative data.
- Give students ill-structured problems and assignments that involve real-world problems.
- Help students visually represent numbers to support their arguments.

IUPUI Assessment Conference 2016
Aligning Outcomes, Assessment, and Faculty Development to Support Student Learning

Faculty Development and Student Learning Connections
A mixed methods, multi-institution study funded by the Spencer Foundation

Institutions: Washington State University, Carleton College, and the Science Education Research Center

Key findings:

- Every institution has a culture of teaching and learning
- Faculty learn about teaching in multiple ways as their careers unfold
- Support for faculty learning leads to improved teaching
- Improved teaching leads to improved student outcomes
- Improvements are best identified at the institutional level rather than in individual classrooms
- Cultivating teaching as a learning process for faculty supports other institutional goals

Publications related to the project:

William Condon, Ellen R. Iverson, Cathryn A. Manduca, Carol Rutz, and Gudrun Willett, *Faculty Development and Student Learning: Assessing the Connections*. Indianapolis, Indiana University Press, 2016.

Carol Rutz, William Condon, Ellen R. Iverson, Cathryn A. Manduca, and Gudrun Willett, "Faculty development and student learning: What is the relationship?" *Change* 44.3 (May/June 2012), 40-47.

Gudrun Willett, Ellen Iverson, Carol Rutz, and Cathryn Manduca, "Measures Matter: Evidence of faculty development effects on faculty and student learning," *Assessing Writing* 20 (2014), 19-36.

Gudrun Willett, "Beyond pedagogy: Community feeling, educational development and power in a U.S. liberal arts college," *Learning and Teaching*, Vol.6.1, Spring 2013, 47-71.

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Methods used in the Carleton portion of the Tracer study

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Research Method	**Type of Material and Scale**	**Purpose**
Artifact Study	Quantitative and Qualitative data - *Campus scale*	Faculty teaching practices Faculty implementation of faculty development in assignments Range and styles of student writing Student writing in response to assignments
Interviews – 80 individuals from 2009-2011	Qualitative data - *Individual cases* (approx. 21% of faculty)	Motivation to participate in faculty development How/why faculty implement new learning in their teaching Perceptions about effects of faculty development on teaching and on student learning Institutional culture (context) Faculty teaching experience/practices at Institution 1 and previously (context)
Participant Observations – including a study of five freshmen seminar courses in Fall 2010	Qualitative data - *Individual cases* (approx. 60% of all faculty development opportunities from 2009-2011 and 33% of the in-class time for case study courses)	Faculty experiences of faculty development Content and skills taught in faculty development Classroom teaching and learning practices Classroom dynamics among students and teachers Institutional culture (context)
End-of-Workshop Surveys	Qualitative and Quantitative data - *Campus scale* (In 11 workshops from 2009-2011, 316 faculty and staff workshop attendees, 70% response rate overall)	Motivations to participate in faculty development Perceptions about workshop benefits and experiences (social networking as well as learning) Plans for integrating new learning in teaching and research Institutional culture (context)
Campus Surveys	Quantitative data - *Campus scale* (2010-2011 HERI survey, 59% response rate of instructional faculty)	Participation in faculty development Teaching practices related to faculty development Institutional culture (context)
Faculty Development Participation Lists	Quantitative data - *Campus scale*	Numbers and demographics of participants Institutional culture (context)
Student Interviews and Surveys	Qualitative data -*Individual cases*	Student views about teaching practices promoted by faculty development Student life and approaches to learning (context)