Data Summary:

Unit-Wide

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Unit Wide Data Summary April 2011

1. Cooperating Teacher Data

Description. This is a questionnaire/survey aligned with the INTASC Principles distributed to cooperating teachers following the supervision of a teacher candidate. It putatively measures cooperating teacher perceptions of the quality of candidate preparation in the INTASC domains.

Table 1.1. Explanation of INTASC Principles (Unit-wide, descending order by '06-'10 mean).

			2007-20 N ~30			2008-2 N ~ 2		2009-2010 N ~ 279			
Principle & Reliability	Explanation of Principle	Mean	SD	Percent Prepared A and B ¹	Mean	SD	Percent Prepared A and B ¹	Mean	SD	Percent Prepared A & B ¹	
INTASC 3 Diverse Students Items 22-25, Reliability = .89	The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.	3.36	.54	100.0	3.42	.57	99.3 92.4	3.40	.55	100.0 93.1	
INTASC 10 Collaboration, Items 60, 61 Reliability = .72	The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.	3.26	.68	98.5 83.3	3.28	.67	98.8 86.1	3.27	.69	99.6 82.4	
INTASC 6, Communication, Items 34-38, Reliability = .86	The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.	3.17	.55	99.6 81.7	3.26	.63	98.5 84.0	3.26	.56	99.6 87.4	
INTASC 9 Reflective Practice, Items 52-54, Reliability = .92	The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.	3.12	.73	96.2 78.2	3.19	.74	96.4 78.0	3.22	.64	98.8 80.9	

Table 1.1, Continued

			2007-20 N ~30			2008-2 N ~ 2		2009-2010 N ~ 279		
Principle & Reliability	Explanation of Principle	Mean	SD	Percent Prepared A and B ¹	Mean	SD	Percent Prepared A and B ¹	Mean	SD	Percent Prepared A & B ¹
INTASC 7 Instructional Planning, Items 39-43, Reliability = .93	The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.	3.04	.62	97.3 79.7	3.16	.68	96.8 80.8	3.10	.63	99.1 80.2
INTASC 5 Learning Environment, Items 29-33, Reliability = .92	The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active	3.01	.67	96.9 71.4	3.08	.64	98.4 77.1	3.08	.64	98.7 77.0
INTASC 1 Subject Matter, Items 13-17, reliability = .89	engagement in learning, and self-motivation. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.	2.97	.63	98.1 77.2	3.08	.65	98.0 78.9	3.06	.65	99.1 78.1
INTASC 2 Student Learning, Items 18-21, reliability = .88	The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.	3.00	.62	98.2 77.5	3.05	.66	98.4 77.3	3.03	.64	99.2 74.6
INTASC 4 Instructional Strategies, Items 26-28, Reliability = .79	The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.	2.89	.64	96.1 59.5	2.99	.65	98.2 62.6	2.99	.65	98.1 64.2
INTASC 8 Assessment, Items 44-48, Reliability = .95	The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.	2.79	.66	95.0 58.9	2.97	.72	95.2 70.8	2.95	.68	97.2 67.4
TOTAL Reliability = .98	Across scales	3.06	.53	98.5	3.15	.57	98.4	3.13	.54	99.6

¹The top figure is the percentage of respondents averaging 2.50 and above across items. The bottom figure is the percent scoring at 2.75 or above, the bottom figure is a better estimate of the average of the highest two response choices.

<u>Table 1.2, all items, 2009-2010, in descending order by mean value (Unit-widen Cooperating Teachers).</u>

Item	N	Mean	SD	Percent Prepared	Domains
23. Value human diversity	277	3.49	.59	95.7	Diverse
24. Respect student as individual including family background	275	3.49	.61	94.2	Diverse
58. Understand the responsibility for obtaining licensure	273	3.45	.67	92.3	Profession
25. Develop a learning community that respects individual differences	277	3.42	.62	92.8	Pedagog
34. Be a thoughtful listener	278	3.42	.63	93.5	Communic
57. Understand code of ethics for MN teach	276	3.35	.69	90.5	Profession
59. Understand the responsibility for maintaining licensure	266	3.35	.72	88.0	
35. Appreciate the cultural dimensions of communication	276	3.34	.61	93.1	
56. Collaborate with professional colleagues	275	3.33	.71	90.2	
60. Understand the role of teacher as a public employee	277	3.31	.70	87.3	
54. Understand the role of reflection as an ongoing process	278	3.30	.71	87.8	
37. Communicate in ways dmstrt sensitivity to cultural differences	275	3.29	.64	90.5	
61. Understand the purpose and contributions of Ed. organizations	272	3.23	.74	84.9	
52. Understand the value of critical thinking as habit of mind	278	3.19	.69	87.1	
22. Understand that children can learn at high level	277	3.18	.66	85.6	
40. Implement learning experiences relevant to learners	277	3.18	.67	86.6	
38. Use a variety of media communication tools	275	3.17	.79	81.5	
53. Understand the value of self-directed learning as habit of mind	277	3.16	.69	84.8	
39. Implement. learning experiences appropriate for curriculum goals	277	3.15	.71	84.5	
20. Use student thinking as a basis for class discussions	279	3.14	.72	83.2	
32. Manage activities to provide active eng of students	278	3.12	.73	84.5	
50. Maintain records of student work	277	3.12	.75	80.1	
21. Use student experience as a basis for class discussion	278	3.11	.70	83.1	
42. Create short-term plans linked to student needs	278	3.11	.71	83.1	
14. Uses students prior understanding to link new concept	278	3.10	.72	80.9	
36. Probe for leaner understanding	278	3.10	.76	80.2	
30. Design. learn communities for students to work collaboratively	278	3.09	.71	83.1	
41. Implement learning experiences based on effective practices	278	3.09	.71	82.4	
27. Monitor. and adjust strategies in resp. to learner feedback	279	3.08	.77	79.9	
31. Manage time to provide for engagement of students	278	3.08	.77	80.6	
44. Value ongoing assessment	278	3.07	.70	80.9	
29. Design Lrn communities where students responsible for selves	277	3.06	.71	81.6	
17. Use curricula that encourage students to understand ideas	278	3.05	.71	80.2	
33. Maximize the class time spent in learning	278	3.04	.77	77.7	

Table 1.2, Continued, Cooperating teachers, individual items

Item	N	Mean	SD	Percent Prepared	Domain
15. Use differ. methods of inquiry	279	3.02	.73	79.9	
49. Monitor teaching strategies related to student success	278	3.01	.73	78.4	
19. Provide. opportunity for students to shape learning	278	3.00	.76	76.6	
16. Develop curricula that encourage students to understand ideas	279	2.98	.80	72.0	Curriculum
55. Use professional literature to support development as teacher	272	2.98	.76	76.1	
28. Use educational technology to broaden student knowledge	278	2.97	.81	72.7	Technology
43. Create long-term plans linked to student needs	278	2.97	.75	77.3	Planning
45. Use a variety of formal assess techniques	277	2.94	.78	72.2	Assessment
46. Use a variety of informal assess techniques	277	2.92	.81	71.0	Assessment
48. Use various assessment techniques to modify teaching	278	2.92	.77	72.9	Assessment
26. Implement MN Graduation Standards	274	2.91	.75	72.3	
47. Use various assess to evaluate student progress	278	2.90	.75	71.2	Assessment
18. Design interdisciplinary learning experiences	275	2.85	.79	67.6	Planning
51. Communicate student progress to parents	267	2.84	.76	70.0	Assessment

Table 1. 3. Technology items and scale (Unit-wide, cooperating teachers).

	2007-2008 N ~302				008-2009 N ~ 289	9	2009-2010 N ~ 279		
Item or Scale	Mean	SD	% Prep	Mean	SD	% Prep	Mean	SD	% Prep
28. Use educational technology to broaden student knowledge	2.93	.78	72.4	3.07	.81	75.3	2.97	.81	72.7
38. Use a variety of media communication tools	2.99	.81	72.8	3.15	.87	76.1	3.17	.80	81.5
Average of two items (Scale)	2.96	.73	80.5	3.10	.80	80.5	3.07	.73	83.9
Average "Prepared" percent across items			72.6			75.7			77.1

<u>Table 1.4. Candidate performance on scales developed through structural analysis (descending order by '06-'10 means, Unit-wide data, cooperating teachers).</u>

	2007-2008 N ~302				2008-2009 N ~ 289			2009-2010 N ~ 279		
Scale	Mean	SD	% Prep A & B ¹	Mean	SD	% Prep A & B ¹	Mean	SD	% Prep A & B ¹	
Factor 4: Equity and diversity/ Items related to equitable treatment of	3.32	.51	93.7	3.39	.55	94.1	3.38	.52	94.3	
diverse students			88.8			87.6			90.7	
Factor 3: Collaboration and	3.23	.59	90.8	3.29	.61	90.7	3.28	.57	91.4	
professional responsibility			85.5			83.8			86.7	
Factor 1: Knowledge of Subject matter and ability to impart	3.01	.57	84.2	3.09	.60	84.1	3.07	.58	85.3	
knowledge and skills (e.g., pedagogy)			73.6			76.6			73.8	
Factor 2: Assessment skill and the			70.2			79.9			78.5	
ability to understand and	2.80	.62		2.99	.68		2.96	.63		
communicate assessment findings			58.9			70.8			67.7	

¹¹The top figure is the percentage of respondents averaging 2.500 and above across items. The bottom figure is the percent scoring at 2.75 or above.

<u>Table 1.5. Cooperating teachers' ratings of university supervisors (2001-2010), descending order by "valid percent yes," Init-wide, cooperating teacher data.</u>

	2007- N ~			-2009 - 289		-2010 279
Item: The university supervisor	N	Valid %	N	Valid %	N	Valid %
item. The university supervisor	Yes	Yes	Yes	Yes	Yes	Yes
was on time;	276	93.2	263	92.0	266	97.1
was cooperative and supportive;	290	98.3	285	98.3	260	96.7
made regular visits;	272	92.5	258	91.2	264	95.7
was available to discuss the student teacher;	283	96.9	271	95.4	260	95.6
discussed and explained the cooperating teacher's responsibilities;	275	93.2	260	90.3	258	95.2
delivered and explained <i>Cooperating Teacher Handbook</i> ;	278	94.6	260	90.3	256	93.4
discussed and explained Cooperating Teacher Handbook;	263	89.2	243	84.7	1	1
Total Satisfactory Responses (Mean Percent "Yes").		94.0		91.7		95.6

¹Item eliminated from survey, 2009

2. Performance Based

Description. This *summative instrument* is filled out by cooperating teachers and university supervisors regarding student teaching performance based on the INTASC Principles. It reportedly taps candidate in vivo performance on 11 global indicators of teacher skill & effectiveness (INTASC Principles + manifestation of appropriate dispositions).

<u>Table 2.1. University supervisor ratings (descending order by mean, Unit-wide, performance-based).</u>

	'07-'08		'(08-6	9	,)		
	N	~ 45	50	N	~ 33	30	ľ	N ~ 300	0
Principles and Standards	Mean	SD	% Prep	Mean	SD	% Prep	Mean	SD	% Prep
Standard 11: Professional Dispositions. The teacher demonstrates enthusiasm, reliability, responsibility, flexibility, initiative, sensitivity to student needs and other disposition related to professional standing.	3.54	.61	95.3	3.60	.54	97.7	3.66	.51	97.9
Principle 9: Reflection & Professional Development: The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.	3.45	.67	94.0	3.44	.58	96.2	3.58	.54	97.3
Principle 10: Partnerships: The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.	3.33	.62	92.2	3.34	.56	96.2	3.45	.57	97.3
<u>Principle 7: Planning Instruction</u> : The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.	3.29	.64	91.1	3.36	.58	95.7	3.41	.58	96.3
Principle 4: Instructional Strategies: The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.	3.23	.65	88.6	3.36	.60	94.2	3.37	.56	96.3
Principle 1: Subject Matter: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.	3.31	.61	92.2	3.32	.59	94.2	3.35	.55	95.9
Principle 6: Communication: The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.	3.31	.60	93.1	3.34	.61	94.2	3.35	.56	95.3
Principle 2: Student Learning: The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.	3.25	.64	90.2	3.32	.56	95.7	3.32	.52	97.6
Principle 5: Learning Environment: The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.	3.24	.67	88.8	3.29	.59	93.8	3.31	.56	96.3
<u>Principle 3: Diverse Learners</u> : The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.	3.09	.61	86.3	3.21	.54	94.5	3.22	.50	96.3
Principle 8: Assessment: The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.	3.06	.63	83.9	3.10	.55	90.1	3.11	.50	93.2

<u>Table 2.2</u>. Cooperating teacher ratings (descending order by mean, Unit-wide, performance-based).

		07-'0	_		08-'0		'09-'10		
	N	~ 43	30	N	~ 31	15	ľ	N ~ 300	0
Principles and Standards	Mean	SD	% Prep	Mean	SD	% Prep	Mean	SD	% Prep
Standard 11: Professional Dispositions. The teacher demonstrates enthusiasm, reliability, responsibility, flexibility, initiative, sensitivity to student needs and other disposition related to professional standing.	3.68	.55	96.2	3.55	.58	95.8	3.65	.50	97.9
Principle 9: Reflection & Professional Development: The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.	3.52	.56	96.7	3.41	.58	95.5	3.61	.50	98.3
Principle 10: Partnerships: The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.	3.40	.62	92.4	3.35	.59	94.2	3.42	.51	98.6
Principle 7: Planning Instruction: The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.	3.43	.64	92.4	3.33	.61	92.7	3.41	.59	94.9
Principle 1: Subject Matter: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.	3.42	.57	95.5	3.34	.58	94.3	3.39	.55	96.6
Principle 5: Learning Environment: The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.	3.37	.66	90.6	3.32	.61	92.4	3.38	.57	95.9
Principle 2: Student Learning: The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.	3.42	.61	93.2	3.33	.60	93.3	3.34	.55	96.2
Principle 4: Instructional Strategies: The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.	3.36	.64	91.3	3.31	.59	94.0	3.34	.54	96.2
Principle 6: Communication: The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.	3.39	.63	92.0	3.36	.53	97.1	3.34	.58	94.5
Principle 3: Diverse Learners: The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.	3.25	.65	88.9	3.19	.56	93.0	3.22	.55	93.8
Principle 8: Assessment: The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.	3.20	.65	87.3	3.14	.57	90.8	3.19	.54	93.8

3. Self-report data

Description. This is a follow-up survey aligned with the INTASC Principles distributed to candidates as they exit the program; it was designed to assess candidate perceptions of the quality of their preparation in the INTASC domains. It is no longer collected as it has been replaced by a Common metrics instrument.

<u>Table 3.1. Explanation of INTASC Principles (Unit-wide, descending order by 2008-'09 means).</u>

		2	2006-2		2	2007-2		2008-2009 N. 202			
D: :1 î			N ~ 3			N ~ 2			N ~ 2		
Principle & Reliability	Description	Mean	SD	Percent Prepared	Mean	SD	Percent Prepared	Mean	SD	Percent Prepared	
INTASC 3 Diverse Students Items 18-21, Reliability = .84	The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.	3.40	.51	95.7	3.43	.52	95.5	3.48	.50	<mark>97.6</mark>	
INTASC10 Collaboration, Items 61-66, Reliability = .87	The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.	3.24	.61	90.0	3.36	.55	94.3	3.42	.56	<mark>94.1</mark>	
INTASC9 Reflective Practice, Items 49-52, Reliability = .90	The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.	3.24	.67	88.4	3.38	.57	93.9	3.40	.55	94.1	
INTASC 2 Student Learning, Items 15-17, Reliability = .81	The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.	3.13	.57	87.7	3.27	.57	93.1	3.31	.56	92.4	
INTASC 5 Learning Environment, Items 24-28, Reliability = .87	The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.	3.22	.53	91.7	3.29	.54	93.5	3.29	.54	90.7	

Table 3.1, Continued, self-report data through spring 2009

		2	2006-2 N ~ 3		2	2007-2 N ~ 2		2	2008-2 N ~ 2	
Principle & Reliability	Description	Mean	SD	Percent Prepared	Mean	SD	Percent Prepared	Mean	SD	Percent Prepared
INTASC 6, Communication, Items 29-34, Reliability =	The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in	3.21	.54	91.7	3.19	.57	90.7	3.21	.53	93.8
INTASC 7 Instructional Planning, Items 35-40, Reliability =	the classroom. The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.	3.00	.56	86.0	3.07	.64	85.8	3.15	.55	90.7
INTASC 4 Instructional Strategies, Items 22,23, Reliability = .57	The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.	3.09	.61	92.0	3.16	.63	91.1	3.13	.58	93.5
INTASC 1 Subject Matter, Items 10-14, reliability = .80	The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.	2.98	.51	84.1	3.04	.50	88.6	3.09	.48	<mark>89.7</mark>
INTASC8 Assessment, Items 41-48, Reliability = .92	The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.	2.93	.63	81.0	3.01	.62	82.6	3.06	.63	<u>85.6</u>
TOTAL	Across scales	3.14	.45	91.1	3.22	.44	93.5	3.25	.42	95.2

Table 3.2. All items, 2008-2009 AY (Unit-wide), descending order, self-report data.

Items	Mean	SD	Percent Prepared	Domain
uo67n62 Respect the privacy of students	3.64	.59	96.2	Ethics
uo68n63 Respect confidentiality of information	3.65	.58	95.8	Ethics/ Prof
uo23n21 Develop learning community that respects individual	3.57	.58	95.5	Diverse/Pedag
uo21n20 Value human diversity	3.60	.59	95.2	Diverse
uo69n64 Be collaborative	3.51	.62	94.8	Collab
uo27n24 Create a positive learning environment	3.52	.60	94.5	Pedagog
uo11n17 Use students prior understandings and link these to new	3.43	.63	93.5	Pedagog
uo00n19 Hold high expectations for all students	3.47	.62	93.2	Diverse
uo10n10 Use multiple strategies to teach concepts	3.29	.59	93.1	Pedagog
uo55n50 Understand the value of critical thinking as habits of	3.41	.64	92.7	Pedagog
uo54n49 Be a reflective professional	3.51	.64	92.0	Reflective
uo66n61 To be ethical	3.48	.70	91.3	Ethics
uo57n52 Understand the role of reflection as an ongoing process.	3.43	.66	91.0	Reflective
uo12n11 Use differing methods of inquiry in teaching major	3.25	.62	90.4	Pedagog
uo29n26 Design learning communities in which student work	3.32	.66	90.0	Communicate
uo31n27 Manage activities for to provide active engagement of	3.34	.66	89.9	
uo17n16 Use student thinking as a basis for class discussions	3.30	.70	89.7	
uo58n53 Continue professional development	3.37	.68	89.6	
uo64n59 Understand the role of the teacher as public employee	3.33	.71	89.6	
uo34n30 Be a thoughtful listener	3.31	.71	88.9	
uo25n22 Monitor and adjust strategies from feedback	3.23	.67	88.7	
uo65n60 Understand the purpose and contributions of education	3.21	.73	88.6	
uo36n32 Probe for learner understanding	3.20	.65	88.5	
uo00n39 Create instructional plans that are linked to students need	3.28	.66	88.2	
uo56n51 Understand the value of self-directed learning as habits of	3.26	.67	87.9	
uo41n37 Implement learning experiences that are relevant to	3.24	.66	87.5	
uo60n55 Collaborate with professional colleagues	3.31	.73	87.2	
uo33n29 Effectively communicate with students	3.27	.72	86.9	
uo16n15 Provide opportunities fro students to shape their own	3.19	.65	86.6	
uo00n18 Address the needs of students	3.29	.71	86.3	
uo46n42 Value ongoing assessment	3.27	.71	86.3	
uo42n38 Implement learning experiences that are based on	3.20	.66	86.0	
uo32n28 Maximize the amount of class time spent in learning	3.16	.70	85.9	
uo14n13 Use curricula that encourage students to explore varied	3.17	.67	85.2	
uo40n36 Implement learning experiences that are appropriate for	3.16	.69	85.1	
uo39n35 Plan for instruction	3.20	.76	84.3	
uo62n57 Understand the responsibility for obtaining licensure	3.25	.79	84.1	
uo35n31 Appreciate the cultural dimensions of communication	3.21	.74	84.0	

Table 3.2, Continued, self-report data

Items	Mean	SD	Percent	Domain
uo45n41 Assess student learning	3.11	.71	83.5	
uo49n45 Use varied assessment to evaluate student progress	3.16	.77	82.8	
uo37n33 Communicate in ways that demonstrate sensitivity to	3.18	.74	82.6	
uo28n25 Design learning communities in which students assume	3.14	.69	82.5	
uo15n14 Design interdisciplinary learning experiences	3.12	.70	82.1	
uo63n58 Understand the responsibility for maintaining licensure	3.15	.80	80.6	
uo38n34 Use a variety of media communication tools	3.08	.77	79.6	Technology
uo59n54 Use professional literature to support teaching	3.12	.77	79.3	Profess
uo61n56 Understand standards of professional conduct in code	3.11	.81	78.9	Ethic/Profess
uo00n44 Develop various forms of assessment	3.10	.84	78.2	Assess
uo71n66 Identify and use community resources	3.11	.86	77.8	Collaborate
uo47n43 Use varied formal assessment techniques	2.96	.78	77.2	Assess
uo50n46 Use varied assessment techniques to modify teaching	3.03	.78	76.8	Assess
uo70n65 Consult with parents/ guardian	3.11	.92	75.6	Collaborate
uo26n23 Use educational technology to broaden stdnt knowledge	3.03	.74	75.3	Tech/ Pedagog
uo52n47 Maintain records of students work	2.97	.89	73.3	Asses/ Profes
uo53n48 Communicate student progress to parents/guardians	2.87	.85	68.9	Assessment
uo24n40 Implement the Minnesota Graduation Standards	2.83	.96	66.3	
uo00n12 Analysis district-wide curricula for improvement	2.60	.72	59.8	Curriculum

4. Unit operations data

Description. Unit operations is a study done each year that targets leavers. Candidates are asked to rate a set of items related to the services offered in the teacher education unit. Candidates rate each item in terms of (a) its importance to them in pursuing degrees and licensure, and (b) the quality of the service or element. Data are analyzed via the quadrant approach: Items above the median on **importance** and above the median on **quality** are interpreted as programmatic strengths, putatively foundational qualities upon which reform efforts could be built. Elements and services that consistently appear above the median on **importance** and below the **quality** median are seen as needing improvement.

Table 4.1. Programmatic strengths (above the median on both importance and quality ratings.

Item	N	Mean Quality	SD
Overall experience with student teaching	529	4.24	.85
Overall rating of field experiences	518	4.00	.98
Interactions with staff members in department office	534	4.26	.85
Access to education courses	534	4.05	.90
Interactions with faculty members in your department	536	4.12	.82
The accuracy of assessment of (your) teaching and planning skills	533	4.05	.88

Table 4.2. Areas that need improvement (above the median on importance, below the median on quality).

Item	N	Mean Quality	SD
Accuracy of advisement in terms of education, cognate, and content courses	534	3.63	1.18
Accuracy of transfer advising (if applicable)	334	3.27	1.36
Accuracy of advising: General education requirements	523	3.32	1.28
Types of field experiences available to you prior to student teaching	514	3.78	1.07