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ABSTRACT

A system was developed for analyzing the content of students' narrative reports of critical/significant events that occurred during experiences in two introductory teacher education courses at Ohio State University. This content analysis system is a hierarchical classification in which each event is classified in four ways: (1) type of experience (i.e., instructional strategy in which the event occurred); (2) type of event (i.e., teacher responsibility or area of teacher decision making); (3) category of event (i.e., specific situation or behavior during an event); and (4) affect of event (i.e., feeling expressed about the event). This report details the major processes involved in developing the system: (1) development of an initial set of categories based on students' reports of events; (2) trial analysis of critical event reports using the initial categories and subsequent revision of the category system; (3) development of rater skill and determination of interrater reliability; (4) establishment of procedures to be used in classifying events; and (5) content analysis of a large sample of critical events. Results obtained from implementation of the evaluation system are also reported. Tables present data obtained on each category of critical events. (JD)

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Content Analysis of Student Critical Events Reported in the Professional Introduction Courses

May, 1984

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Content Analysis of Student Reported Critical Events In the Professional Introduction Courses

Summary

This report describes the development, revision, and implementation of a system for content analyzing students' narrative reports of critical/significant events that occurred during experiences in Education 450 and Education 451.

The content analysis system is a hierarchical classification in which each event is classified in four ways: (1) type of experience, i.e., instructional strategy in which the event occurred, (2) type of event, i.e., teacher responsibility or area or teacher decision-making, (3) category of event, i.e., specific situation or behavior under a type of event, and (4) affect of event, i.e., feeling expressed about the event.

The first major content analysis using the system included 64 Critical Event reports from Education 450 and 103 from Education 451. Frequently reports included accounts of more than one critical event. Up to three events were coded from each report, resulting in a total of a count of 89 codeable events in Education 450 and 159 codeable events in Education 451. Vague or general descriptions were marked uncodeable.

The results of the analysis showed that 85% of the critical events reported in Education 450 occurred in three types of experiences: field, microteaching, and reflective teaching. In Education 451 88% of the reported critical events occurred in the field.

Two types of events, teaching (46%) and planning (30%), accounted for the major portion of type of events in Education 450. In Education 451 type of event was somewhat evenly distributed between four types of events: student characteristics (25%), teaching (24%), planning (22%), and classroom control and teacher-student relationships (20%).

Of the 43 possible categories of events a few were classified frequently. In Education 450 high-frequency (5 or more times) categories included time for careful preparation, successful lesson, impact of evaluative feedback, and unexpected learner characteristics. In Education 451 13 categories were high-frequency categories, three of which matched 450 high-frequency categories.

In both courses students expressed more positive than ncutral or negative feelings; however, the percentage of positive feelings in Education 450 (78%) was considerably higher than in Education 451 (56%).

In conclusion the analysis shows a number of differences in types of experiences and events considered important to students in Education 450 and 451. These differences reflect the particular emphases in goals and experiences within each course and affirm the relevance of such experiences to students.



Introduction

One of the four major data components in the College of Education Student Information System (SIS) is narrative data. A medium through which narrative data is collected in the Professional Introduction course (PI) is the Critical Event Form (Appendix A).

Students in PI 450 and 451 are asked to submit descriptions of specific professional experiences that have had particular importance or meaning to them, i.e., critical events. The student is first asked to write a low inference decription of the event. Then a high inference judgement of the event is requested.

This report details the development of a system for content analyzing PI students' reports of critical events. The major processes involved were:

- A. Development of an initial set of categories based on students' reports of events.
- B. Trial analysis of critical event reports using the initial categories and subsequent revision of the category system.
- C. Development of rater skill and determination of interrater reliability.
- D. Establishment of procedures to be used in classifying events.
- E. Content analysis of a large sample of critical events.

A. Development of an Initial Set of Categories

Approximately 100 critical event reports were read and a listing of the types of events contained in the reports was made. A synthesis of the varied descriptions resulted in a three-stage hierarchical classification. The first stage of the classification is type of experience. It is the type of teacher education experience or teaching strategy in which the described event occurs. Type of experience contained five major experience areas. An example is field experience. Type of experience subsumes the next stage of classification, type of event.



This is the type of teacher responsibility or area of teacher decision-making. There were five major event types; one example is planning. Under each type of event a set of specific situations, behaviors, or outcomes was listed. A specific event is classified as <u>category of event</u>. An example of a planning category is use of curriculum guides. A total of 29 categories were delineated under the five types of events.

Generally, students' descriptions of events contained explicit references to their feelings about the events. In order to examine the dimension of feelings a fourth classification, affect of event, i.e., expression of positive, neutral, or negative feelings toward the specific event, was added to the analysis system. The four-part classification system was formatted into a PI Critical Event Content Analysis Form.

B. Trial Analysis Using the Initial Set of Categories

A set of 50 randomly selected critical event reports were content analyzed to try out the classification system. It was found that three additional types of experiences and 14 additional categories of events were needed. These were added to the system resulting in a total of eight types of experiences, five types of events, forty-three categories of events, and three levels of affect. To handle exceptions, an "other" category was added under each part of the classification system except affect. The revised Content Analysis Form is included in the report as Appendix B.

C. Interrater Reliability

Two raters independently analyzed three sets of 10 randomly selected critical event reports using the revised Content Analysis Form. The three sets of reports were labeled first, second, and third trial. Trials one and two were treated as



rater training sessions. Overall, the sessions yielded refinement of definitions and rater skill (see Table 2).

In addition to agreement on the four parts of the classification, agreement on the total number of events classified in each trial was calculated. Number of events reported on each critical event form varied, probably due to the complex nature of significant/critical learning events. It was decided to classify a maximum of three events from each report.

Agreement on the number of events classified in each trial was calculated using analysis of variance. The mean number of events classified by the two raters for each trial (set of 10 reports) is listed in Table 1. No statistically significant differences between the number of events classified by the two raters were found in the three trials (F values were .80, 1.27, and 1.00 respectively; an F value of 4.35 was required for an .05 level of significance).

Agreement on classifications of type of experience, type of event, category of event, and affect of event was defined as the percentage of time in which the same classification was assigned to pairs of identified events. When a second or third event that was classified by one rater had no pair from the other rater, the event was dropped from the comparison. The reason for dropping the unpaired event was that the difference in judgment was whether or not the report merited an additional classification. The difference in the number of events classified was not significantly different overall.

Table 2 reports rater agreement for each trial on the four parts of the classification system. The degree of agreement was higher for trial 3 in three of four classifications. Agreement on affect, the most subjective element, did not change significantly over trials.



Table 1

Mean Number of Events Classified from Each Critical Event Form by Two Raters

	<u>Trial 1</u>	Trial 2	Trial 3
Rater 1	1.7	1.9	1.7
Rater 2	2.0	1.5	2.0

K = 10 forms in each trial

Table 2

Agreement Between Two Raters on Classification of Critical Events

Percentage of Agreement

		<u>Trial 1</u>	Trial 2	Trial 3
(1)	Type of experience	94	· 93	100
(2)	Type of event	87	93	94
(3)	Category of event	67	64	81
(4)	Affect of event	73	71	69



Procedural Guides Used in Classifying Events

The following guides were developed during the first and second reliability trials and served to provide consistency in the content analysis for the third reliability trial and the large sample analysis that follows:

- Analyze events that are a significant part of the report. Usually a single sentence or a minor reference is not classified.
- Classify up to three separate events from each critical event report. (2)
- (3) Affect is to be coded in reference to each event: not in reference to each report form.
- Reports that are general or vague will be marked non-codeable. (4)
- The classifications will be coded and transferred to optical scan (5) sheets as follows:
 - Identification Number Social Security Number
 - Special Codes: Number of Critical Event Form -- Course Number: 0=450, 1=451 0 -- Quarter form was collected: 1=Summer, 2=Autumn, 3=Winter, 4=Spring P -- Year form was collected: 2=1982, 3=1983, 4=1984
 - c. Item numbers will be used in groups of six as follows:

Event #1	Event #2	Event #3
column #1-2 Type of experience 3 Type of event	column #7-8 9	column #13-14 15
4-5 Category of event	10-11	16-17
6 Affect of event	12	18

E. Content Analysis of a Large Sample

The first major content analysis included 64 Critical Event reports from Education 450 and 103 from Education 451 collected at the end of Winter Quarter 1983. Students were asked to submit for analysis a report of the most significant/ critical event of the quarter.

The reports were analyzed for number of events and frequency of type of experience, type of event, category of event, and affect of event. Descriptions of the analysis from the two courses are presented below.



Number of Reports and Events Analyzed

Although the critical event form requests one critical event per form, students often reported more than one. Table 3 shows the number of report forms and events analyzed for each course. The average number of events classified per critical event form was slightly higher for Education 451 (1.6) than for Education 450 (1.4).

Type of Experience in which Events Occurred

The type of teacher education experiences in which the reported events occurred are shown in Table 4. In Education 450, 84.7% of the reported critical events occurred in three types of experiences, i.e., field, microteaching, and reflective teaching. In Education 451, 87.7% of the critical events occurred in one type of experience, i.e., field experience. Non-codeable events were deleted from the remaining classifications, resulting in a count (K) of 89 events in Education 450 and 159 events in Education 451.

Type of Event

The type of events, i.e., teacher responsibility or area of decision making, that were reported as critical by teacher education students are shown in Table 5. In Education 450 the responsibility of teaching was critical, i.e., significant or meaningful, in 46.1% of the events. Planning, also a high frequency event, was reported in 30.3% of the events.

The events of significance in Education 451 were somewhat evenly represented in four of the five major events: student characteristics (25.2%), teaching (23.9%), planning (22.0%), and classroom control and teacher-student relationships (19.5%). The more even distribution is probably related to the greater proportion of time spent in the field in Education 451 than in Education 450.

Q

Category of Event

Although a total of 43 specific categories of situations and behaviors within the five major types of events are included in the third stage of the



classification system, 60% of the critical events reported in Education 450 occurred in only five categories. In Education 451 72% of the critical events occurred in 13 categories. Three of these frequently occurring categories are the same in both courses. A high-frequency category is one that occurred five or more times. See Table 6 for frequency of all 43 categories and Table 7 for high-frequency categories.

Affect of Event

A student's report of feelings about an event was classified into positive, neutral, or negative affect for each event. If a student included more than one feeling of affect for an event, the concluding feeling was used for classification purposes. Although students were more positive than negative in both courses, more negative feelings were expressed in Education 451 than in Education 450 (see Table 8).



Table 3 Number of Reports and Events Analyzed in PI Courses

	Educ 450	Educ 451
Number of Report Forms Analyzed (N)	64	- 103
Number of Events Classified (K)	91	163
X Events per Report	1.4	1.6

Table 4

Type of Experience (Teacher Education Strategy)

	<u>Edi</u>	Educ 450		<u>ıc 451</u>
	K	<u>x</u>	<u>K</u>	<u>z</u>
Field Experience	15	16.5	149	87.7
Microteaching	32	35,2	5	3.1
Reflective Teaching	30	33.0	. 1	.6
Teacher Clarity Training	4	3.3	0	0.0
Handicapping Awareness	0	0.0	8	5.0
Cultural Awareness	0	0.0	1	.6
Rope Course	0	0.0	1	.6
In-class Session/Interaction	4	4.4	0	0.0
Other	5	5.5	0	0.0
Non-codeable*	_2	2.2	5	2.5
	91	100.0	161	100.1**

^{*}Note: The total codeable events (89 for Education 450 and 159 for Education 451) are used in the following tables.

^{**} Rounding error

Table 5

Type of Event (Teacher Responsibility or Area of Decision Making)

	Educ 450		<u>Ed</u>	uc 451	
•	<u>K</u>	<u>*</u>	<u>K</u>	<u>x</u>	
Planning	27	30.3	35	22.0	
Teaching	41	46.1	38	23.9	
Classroom Control; Teacher-Student Relationships	3	3.4	· 31	19.5	
Student Characteristics	7	7.9	40	25.2	
Professionalism	2	2.2	12	7.5	
Other	9	10.1	_3	1.9	
	89	100.0	159	100.0	

Table 6

Category of Event (Specific Situations, Behaviors, or Outcomes Within Types of Events)

			Educ 450		Educ	451
	<u>K</u>	% of Yotal Events	% of Planning Events	<u>K</u>	% of Total Events	% of Planning Events
PLANNING						•
1. Use of curriculum guides	2.	1.1	3.7	2	1.3	5.7
2. Match of content and strategies	1	1.1	3.7	6	3.8	17.1
3. Time for careful preparation	19	21.3	70.4	9	5.7	17.1 25.7 -
4. Changing plans	0	0.0	0.0	7	4.4	20.0
5. Space utilization	0	0.0	0.0	0	0.0	0.0
6. Use of a written plan	2	2.2	7.4	3	1.9	8.6
7. Use of an outline plan	1	1.1	3.7	2	1.3	5.7
8. Use of own creativity	3	3.4	11.1	6	3.8	17.1
•	27	30.3	100.0	35	22.2	99.9



Table 6 (continued)

•	•	Educ 4	150 .		Educ 4	151
•	K	% of Total Events	% of Teaching Events	K	% of Total Events	% of Teaching Events
TEACHING 9/Learner attention 10. Strategies involving learners 11. Successful lesson 12. Unsuccessful lesson 13. Unresponsive learners 14. Unclear directions 15. Impact of competition 16. Impact of tests 17. Impact of feedback 18. Lack of knowledge of content 19. Controversial content 20: Transfer of Seaching skills	0 2 .14 3 0 3 0 1 14 -2 1	0.0 2.2 15.7 3.4 0.0 1.1 15.7 1.1 2.2 1.1	0.0 4.9 34.1 7.3 0.0 7.3 0.0 2.4 34.1 2.4 4.9 2.4 99.8	2 7 16 1 2 1 2 1 2 0 38	1.3 4.4 10.1 .6 1.3 1.3 .6 1.3 1.3 0.0 23.9	5.3 18.4 42.1 2.6 5.3 2.6 5.3 2.6 5.3 0.0
CLASSROOM CONTROL; TEACHER-STUDENT RELATIONSHIPS 21. Setting rules and expectations 22. Being fair and consistent 23. Uncoopertative students 24. Misbehaving students 25. Disrespect of students 26. Immoral intentions or acts 27. Negative and abusive discipline 28. Positive reinforcement, recognition	1 0 0 0 0 1 1 3	% of Total Events 1.1 0.0 0.0 0.0 0.0 1.1 1.1 1.1	33.3 0.0 0.0 0.0 0.0 0.0 33.3 33.3	7 3 0 5 0 1 8 7	% of Total Events 4.4 1.9 0.0 3.2 0.0 .6 5.0 4.4	22.6 9.7 0.0 16.1 0.0 3.2 25.8 22.6
STUDENT CHARACTERISTICS 29. Unexpected learner character- 1stics	<u>K</u>	% of Total Events	% of Char. Events	<u>K</u> 25	% of Total Events	% of Char. Events
30. Not knowing individuals 31. Providing for special needs 32. Meeting varied needs 33. Learner background 34. Knowledgeable learners	010007	0.0 1.1 0.0 0.0 0.0 7.8	0.0 14.3 0.0 0.0 0.0 100.0	1 6 3 4 1 40	.6 3.8 1.9 2.5 .6 25.1	2.5 15.0 7.5 10.0 2.5 100.0

Table 6 (continued)

ú *		Educ 4	150		Educ 4	<u>451</u>
PROFESSIONALISM .	. <u>K</u>	% of Total Events	% of Profess. Events	<u>K</u>	% of Total Events	% of Profess. Events
35. Labeling of learners 36. Problems with cooperating teacher feedback	0	0.0	0.0 50.0	0	0.0 0.0	0.0
 37. Veteran teacher discouragement 38. Expert teacher modeling 39. Lack of expert teacher modeling 40. Disagreement with teacher goals, beliefs, actions 	0 0 0	0.0 1.1 0.0 0.0	0.0 50.0 0.0 0.0	2 2 5 3	1.3 1.3 3.1 1.9	16.7 16.7 41.7 25.0
beileis, decions	2	2.2	100.00	12	7.6	100.1
OTHER EVENTS	<u>K</u>	% of Total Events	% of Other Events	<u>K</u> .	% of Total Events	% of Other Events
41. Effect of group cooperation 42. Effect of negative attitude 43. Providing space, facilities Other	3 1 0 5 9	3.4 1.1 0.0 5.6 10.1	33.3 11.1 0.0 55.6 100.0	0 2 0 3	.6 0.0 1.3 0.0 1.9	33.3 0.0 66.6 0.0 99.9
	89	99.8		159	100.1	

Table 7

High Frequency Categories (Event reported five or more times)

•	450		<u>451</u>
Type o. Event	Category of Event		Category of Event
Planning:	*1. Time for careful preparation	2. 3.	Time for careful preparation Changing plans Using creativity Matching content to strategies
Teaching	*2. Successful lesson 3. Impact of Evaluative feedback		Successful lesson Strategies involving learners
Classroom Control and Teacher-Pupil Relationships:		8. 9.	Negative discipline Positive reinforcement Setting rules Reacting to misbehavior
Student Characteristics:	*4. Unexpected learner - characteristics		Unexpected learner characterisitcs Providing for special needs
Professionalism:		13.	Lack of expert teacher modeling
<u>Other</u>	5. Other		· · · · · · · · · · · · · · · · · · ·

Table 8

	Affec	t of Event		
	Educ	<u>450</u>	Edu	ic 451
	<u>K</u> .	<u>x</u>	<u>K</u>	<u>z</u>
Positive	69	77.5	89	56.0
Neutral	7	7.9	14	8.8
Negative		14.6 00.0	56 159	$\frac{35.2}{100.0}$



The Critical Event in PI

The use of the Critical Event record in PI has some similarities to the Experience Report Form (ERF) used throughout the Freshman Early Experiencing Program. In PI we are interested in having you formulate conclusions about the professional events which had a significant impact on you.

PI Critical Events are the parts of professional experiences which have particular importance and meaning to you. Such events will frequently evoke feelings and thoughts which can be formulated into personal theories to guide actions in educational settings.

In reporting a Critical Event it is important to describe a specific event and to separate description from interpretations and conclusions.

Specifying an event. Focus on situations that occur within your experiences in the field, lab, classroom, or individual work. Decide on the particular situations and the factors influencing them which are most pertinent to your feelings and thoughts.

Separating description from interpretations and conclusions.* Accounts of what happened in situations often contain a mixture of information and facts (low inference; description) and value statements, observer inferences and observer characterizations (high inference; judgments). The report form is divided into two sections. In the description section, statements should contain the observed circumstances and behaviors. In the judgment section, statements should contain your feelings, thoughts, and conclusions.

Example

Description of Event

Judgments of Event

For my second RTL, I prepared a written plan and referred to it about 8 times during the 10 minute lesson.

I spent approximately 3 hours preparing the lesson; twice as long as for my first RTL.

I rejected 3 approaches before I came up with a way to teach which hadn't been tried before in 450. For my first RTL I used the first idea I had come up with.

I felt more relaxed and a great deal more confident than I did during my first RTL. I was more organized and felt that the lesson plan helped considerably.

This lesson was creative because I thought of a different way to do it. The preparation required more time; but it was worth it because the lesson was creative and successful.

Overall Conclusion: I should explore beyond my first ideas of ways to teach because I want to be creative and successful in my teaching.

Your instructor will ask you to complete a number of Critical Event forms during PI. At the end of the quarter select the most significant event and give your instructor a copy. This one Critical Event form will be filed with the Student Information System.

*Duncan, James K. <u>Climate for Learning: Evaluation Component</u>. Bloomington, Ill.: Phi Delta Kappa, 1980.



P.I. CRITICAL EVENT REPORT FORM

•	
Name	
SSN	
Date	
Course No.	
Describe an event which had a significant factual circumstances and behaviors of the thoughts and conclusions resulting from the	event. Second. state your feelings.
Description of the Event	Judgments of the Event
·	<i>'</i>
	en e
•*	
	•
•	
. %	
	•
•	
	Overall Conclusion:



		Course		tr./Yr					<u></u>	. 1	1	1		
•		<u>Set 1: T</u>	ypes of Experiences	Set 2: Types of Ever's	(A) Planning	(B)			(C) Classroom Control: Teacher-Student Relationships	(0) Student Characteristics	(E) Professionalisa	(F) Other		
		01. F	feld	l										
		02.	icroteaching			<u> </u>								
		04. 1	eflective Teaching eacher Clarity Trainin	19										
		U5. H	andicapping Awareness witural Awareness			 								
		117.	one Course											
		D9.	n-class Interaction											
		10.	on-codeable; unclear lescritption					<u> </u>						
Set Arro Town The	<u>rd</u>	Set 3: Categories of Events A. Planning Events					Set 3: Categories of Events (continued) 28. Reacting to impact of positive reinforcement; recognition on learners							
		01. Use of curriculum guides; teacher resources												
語	S	02. Match of content and strategies to context												
Positive	8	03. Spending time for careful preparation					D. Student Characteristics							
33	3	04. Situations requiring change of plans												
			05. Space utilization					29,	Reacting to culture, as	Reacting to unexpected learner characteristics culture, age, ability				
	1		06. Use of written plan: to organize, to be prepared					30.		not knowing inc	itviduals_			
								31.		for learners'		5		
			07. Use of brief notes, outline plan while teaching 08. Use of creativity, personal ideas					32.		difficulty of				
		08.	Use of creativity, per	20181 100	**	<u></u>	-	-			,			
								<u> 33.</u>	 ;	unfortunate !				
		B. Teaching Events						34.	than thouse	th learners who clves	are more :			
		09. Getting and keeping learners' attention												
		10.	Use of strategies that	involve	learners									
		11. Judging that a lesson went well, objectives were accomplished					E. Professionalism							
		12.	12. Judging that a lesson went poorly, little was accomplished					35. Reacting to labels given to learners by teachers 36. Reacting to lack of feedback of conflicting						
		13. Unresponsive, uninterested learners					feedback							
		14. Directions were unclear, not understood						37.	Reacting t	o verteron tee	thers' disc	puragement		
1		15. Impact of competition in learning games					38. Reacting to expert teacher modeling							
		16. Impact of tests, evaluations					1	39.	Reacting t	o lack of expe	rtise in te	scher		
			Impact of evaluative		rewards		}		modeling			14.6		
		18. Lack of knowledge or interest in content being taught						40,	. Dişagreema	nt with teache	r g0815, 98	11611, 3011011		
		19.	Content is controvers	ial or se	nsitive					<u> </u>				
		20. Transferability of teaching skills					F	. 0 U	her Events			•		
					 ,] -	€1	. Effect of	group cooperst	fon			
				<u> </u>				42	. Effect of	negative attit	ude			
- 1		and Consult Toucher Shudent Relationships					1			space. facilit				
		: —	21. The need for rules, for establishing expectations						Other					
			The need to be fair a											
1			Reacting to uncoopera				L							
			Reacting to misbehav				BEST COPY AVAILABLE							
			-											
		25.			op acts	.,, 	18				LC			
1	1	25.	Reacting to immoral	Intention			1		~ ~	- -				

