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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 securred); (2) type of event (i.e., teacher responsibility or area of reacher 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: (i) development of an initial set of categories based on students' reports of events; $i^{2}$ ) 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 CoursesSunmary

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 hierarcaical 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, f.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. Frequentiy reports included accounts of more than one critical event. Up to three events were coded $f$ om each report, reaplting in a total of a count of 89 codeable events in Ed:cation 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 $45188 \%$ 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 45113 categories were highfrequency categories, three of which matched 450 high-frequency categories.

In both courses students expressed more positive than nostral 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 numbur of differences in types of experiences and events considered important to students in Educetion 450 and 451. These difference:: reflect the particular emphases in goals and experiences within each course and affirm the relevance of such experiences $t$ : 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 ard 451 are asked to submit descriptions of specific professional experiences that have had particular importance or meaning to them, f.e., critical events. The student is first asked to write a low inference decription of the event. Than"a high inference judgement of the event is raquested.

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 detemination 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 $c$ f 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 outcones was iisted. A specific event is classiffed as category of event. An example of a plani.ing category ts 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 Analys is 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 fourd that three additional types of experiences and 14 additional categories of wents 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 agrement 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 mas 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 agrement 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

Trial 1 Trial 2 Trial 3

Rater 1
Rater 2
2
1.7
2.5
1.9
1.7
2.0

## Table 2

Agreement Between Two Raters on Classification of Critical Events

|  | Percentage of Agreement |  |  |
| :--- | :---: | :---: | :---: |
|  | Trial 1 | 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 |

## D. 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 andysis that follows:
(1) Analyze events that are a significant part of the report. Usually a single sentence or a minor reference is not classified.
(2) Classify up to three separate events from each critical event report.
(3) Affect is to be coded in reference to each event; not in reference to each report form.
(4) Reports that are general or vague will be marked nori-codeable.
(5) The classifications will be coded and transferred to optical scan sheets as follows:
a. Identification Number - Social Security Number
b. Special Codes:
$\left.\begin{array}{l}K \\ M\end{array}\right\}$ Number of Critical Event Form
N -- 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
column \#7-8
3 Type of event
9
10-11
4-5 Category of event
6 Affect of event
12
Event \#3
column \#1-2 Type of experience
column \#13-14
16-17
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 '983. 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 anaiysis 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 repurted 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\%), teachinq (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.

Category of Event
Although a tetal 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 <br> Educ 451

Number of Report Forms Analyzed (N) 64103

Number of Events Classiffed (K) 91
X Events per Report 1.4

Table 4

Type of Experience (Teacher Education Strategy)

|  | Educ 450 |  | Educ 451 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | K | \% | K | \% |
| Field Exper:once | 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 Ariareness | 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** |

[^1]Table 5

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

|  | Educ 450 |  | Educ 451 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | K | \% | K | \% |
| Planning | 27 | 30.3 | 35 | 22.0 |
| Teaching | 41 | 46.1 | 38 | 23.9 |
| Classroom Control; Teacher-Student Relation=hipe | 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
(Specific Situations, Behaviors, or Outcomes Within Types of Events)

Educ 450


PLANNING

1. Use of curriculum nuides
2. Match of content and strategies
3. Time for careful preparation 19
4. Changing plans 0
5. Space utilization
6. Use of a written plan
7. Use of an outline plan
8. Use of own creativity

Educ 451


| \% of | $\begin{array}{l}\text { \% of } \\ \text { Iotal } \\ \text { Planning }\end{array}$ |
| :--- | :--- | :--- |

Table 6 (continued)


Table 6 (continued)

| $\because$ | Educ 450 |  |  |  | Educ 451 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | .K | \% of <br> Tota <br> Events | $\begin{aligned} & \text { \% of } \\ & \text { Profess. } \\ & \text { Events } \end{aligned}$ | K | $\begin{aligned} & \text { \% of } \\ & \text { Total } \\ & \text { Events } \end{aligned}$ | $\begin{aligned} & \text { \% of } \\ & \text { Profess. } \\ & \text { Events } \end{aligned}$ |
| PROFESSIONALISM |  |  |  |  |  |  |
| 35. Labeling of learners | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| 36. Problems with cooperating teacher feedback | 1 | 1.1 | 50.0 | 0 | 0.0 | 0.0 |
| 37. Veteran teacher discouragement |  | 0.0 | 0.0 | 2 | 1.3 | 16.7 |
| 38. Expert teacher modeling | 1 | 1.1 | 50.0 | 2 | 1.3 | 16.7 |
| 39. Lack of expert teacher modêling | 0 | 0.0 | 0.0 | 5 | 3.1 | 41.7 |
| 40. Disagreement with teacher goals, beliefs, actions |  | 0.0 | 0.0 | 3 | 1.9 | 25.0 |
|  | 2 | 2.2 | 100.00 | 12 | 7.6 | 100.1 |
|  |  | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ | $\begin{aligned} & \text { \% of } \\ & \text { Other } \end{aligned}$ |  | $\begin{aligned} & \text { \% of } \\ & \text { Iotal } \end{aligned}$ | \% of Other |
| 'OTHER EVENTS |  |  |  |  |  |  |
| 41. Effect of group cooperation | 3 | 3.4 | 33.3 | 1 | . 6 | 33.3 |
| 42. Effect of negative attitude | 1 | 1.1 | 11.1 | 0 | 0.0 | 0.0 |
| 43. Providing space, facilities | 0 | 0.0 | 0.0 | 2 | 1.3 | 66.6 |
| Other | 5 | 5.6 | 55.6 | 0 | 0.0 | 0.0 |
|  | 9 | 10.1 | 100.0 | 3 | 1.9 | 99.9 |
|  | 89 | 99.8 |  | 159 | 100.1 |  |



Table 7
High Frequency Categories
(Event reported five or more times)

450
Tategory of Event
*1. Tine for careful preparation

451 Category of Event
*1. Time for careful preparation
2. Changing plans
3. Using creativity
4. Matching content to strategies

| Teaching | *2. Successful lesson <br> 3. Impact of Evaluative feedback | *5. Successful lesson <br> 6. Strategies involving learners |
| :---: | :---: | :---: |
| Classroom Control and Teacher-Pupil Relationships: | $\sim$ | 7. Negative discipline <br> B. Positive reinforcement <br> 9. Setting rules <br> 10. Reacting to misbehavior |
| Student Characteristics: | *4. Unexpected learner characteristics | *11. Unexpected learner characterisitcs <br> 12. Providing for special needs |
| Professionalism: |  | 13. Lack of expert teacher modeling |
| Other | 5. Other |  |

*Frequently occurring categories in both Education 450 and 451.

|  | Affect of Event |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Educ 450 |  | Educ 451 |  |
|  | $\underline{K}$ | 尔 | $\underline{K}$ | $\underline{\text { q }}$ |
| Positive | 69 | 77.5 | 89 | 56.0 |
| Neutral | 7 | 7.9 | 14 | 8.8 |
| Regative | $\frac{13}{89}$ | $\frac{14.6}{10.0}$ | $\frac{56}{159}$ | 35.2 100.0 |

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 fommlated 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

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.

## Judgments of Event

## P.I. CRITICAL EVENT REPORT FORM

Name
SSN
Date
Course No.

Describe an event which had a significant impact on you. First, describe the factual circumstances and behaviors of the event. Second, state your feelings, thoughts and conclusions resulting from the event.


Overall Conclusion:


Set 3: Categordes Events
A. Planning Erents

1. Use of curriculum guides: tercher nesommen
2. Hetch of content and strategies to context
3. Spendigh time for careful preparntion
4. sttuat?ons requifing change of plans

05, Sarce utilizntion
Of, He of writen plan: to organtze, to be propared
07. Use of briof notes, outline pian while tesching
08. Usi of creativiey, personal thens
8. Teacitin Events

Qs. Gattim and kecpint learners' attention
10. Use of strategies that involve lespmers
11. Judging that a losson went mell, objectives mane accorpplished
12. Jurging that a lesson ment pooriy, itttle ras accomplished
13. Unresponsive, uninterested learmery
14. Directions were unclear, not understeood
15. Inpact of competition in learning games
16. Impact of tests, ovaluations
17. Rypact of evelustive feedback, rejards
18. Lack of knowledge or internst in content being teught
9. Content is controversial or sensitive
20. Transferability of tanching skills
$\longrightarrow$ ——_m

## F. ogher evenes

41. Effect of smour cepresretion
42. Effect of nepative attitude
C. Classroom Control: Teacher-Student Relafionghip:
43. The nead for mules, for establishing expactations
44. The need to be fair and consistent
45. Reacting to uncooperstive students
46. Reacting to misbeharior
47. Rencting to disrespere
48. Rosetion to fmarel intentions or acts
49. neectivs to oftrer' negative t slusive decintio of Toumer

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[^1]:    *Note: The total codeable events (89 for Educaition 450 and 159 for Education 451) are used in the following tables.

