

PREDICTING EFFECTIVENESS IN CPS FACILITATION

**AN EXECUTIVE SUMMARY OF FOUCAR-SZOCKI'S 1982
MASTER'S PROJECT 'POSSIBLE PREDICTORS OF
EFFECTIVENESS IN THE FACILITATION OF CREATIVE
PROBLEM SOLVING.'**

By Sharon A. Myers

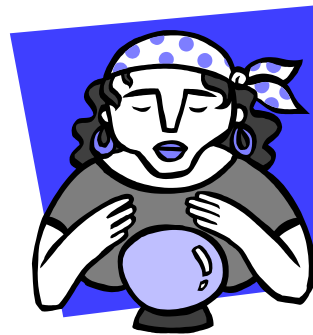
International Center for
Studies in Creativity

THE INTRO

This thesis is designed to identify several variables which might serve as possible predictors of an individual's effectiveness as a facilitator of CPS in an undergraduate college course.

Variables are gathered through various instruments administered to both the facilitators and their students. Predictors are identified through a stepwise multiple regression analysis of the 28 independent variables with the four dependent variables.

Foucar-Szocki identified three general categories, which contribute to a facilitator's effectiveness. These are identified as characteristics, content knowledge and transmission ability. (Foucar-Szocki, 1982, p.1)



It may no longer be a guessing game.

A LITTLE BIT OF BACKGROUND

Foucar-Szocki asked two specific research questions about 28 separate independent variables. She divided these 28 variables into the areas of study identified by Rhodes (1961) as Person, process, product and press.

1. What is the correlation of each independent variable with each dependent variable? Are these correlations significantly different from zero?

2. For each dependent criterion variable, what set of independent (predictor) variables will constitute the optimum predictors?

(Foucar-Szocki, 1982, p.7)

Research Questions?

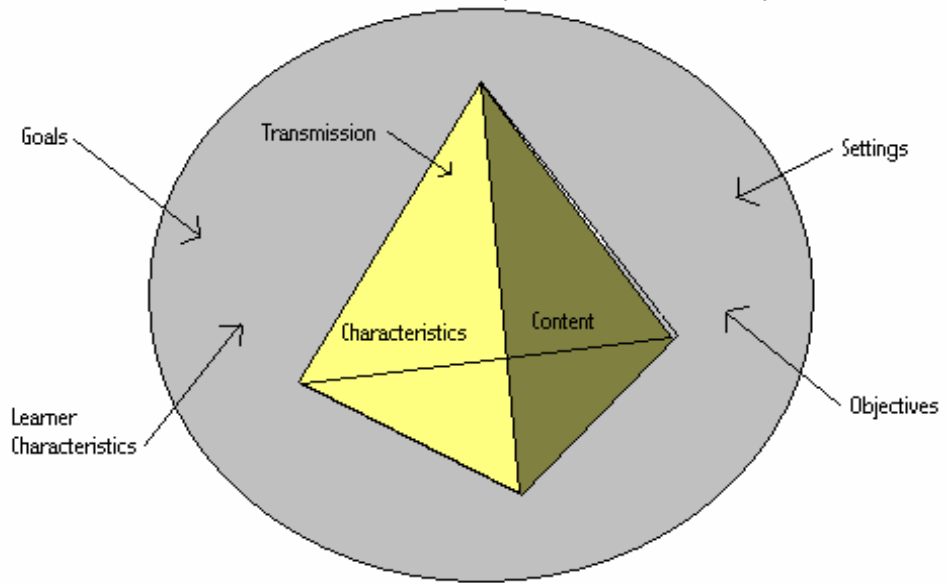
- What is the correlation of independent variables to dependent variables?
- Are correlations significantly different from zero?
- What set of independent (predictor) variables constitute the optimum predictors?

METHODS AND PROCEDURES

12 Instructors (Facilitators) and 106 students in three sections of a semester long introduction course in CS at SUCB. Eight of the facilitators (66.7 percent) were male and remaining 4 (33.3 percent) were female. Their mean age was 31 with a range from 25 to 45.

Approximately 75 percent of the student population was female; the remaining 25 percent male. The population was distributed as follows: freshmen 22.6%, sophomores 30.2%, juniors 30.2% and seniors 13.2%. The remaining 3.8 percent were graduate or continuing education students.

A Model of the Inter-Relationship of Facilitation Components



A Model of the Inter-Relationship of Facilitation Components
(Foucar-Szocki, 1982, p.14)

INSTRUMENTS

Foucar-Szocki administered six instruments to the facilitator group. Two of the six instruments were also administered to the student group.

Independent Variables

1. Product Improvement (Verbal) The groups were given a toy elephant or monkey and asked to list the cleverest, most unusual and most interesting ways they could think for changing the toy so that children would have more fun with it.
2. Just Suppose (verbal) In this subtest, the students and facilitators were presented with an improbable situation. They were then asked to list all of the possible consequences that might occur if this improbable situation were to happen.
3. Parallel Lines/Circles (figural) Both groups were presented with two pages of parallel lines. They were instructed to make as many objects or pictures out of the lines as possible. Only the student groups were given the posttest which consisted of two pages of circles. The same instructions were given.

“Both the facilitator and student groups were given three subtests of the Torrance Test of Creative Thinking; two verbal and one figural”

Four interscorer reliability studies conducted with various groups consistently yielded correlation coefficients of .90 or better (Torrance, 1974, p.17). A test-retest study was conducted with verbal forms a and b as well as figural forms a and b involving 118 fourth, fifth and sixth grade students with alternate forms being administered from one-to-two weeks apart. (Foucar-Szocki, 1982, p.52)

LIMITATIONS OF THE STUDY

The number of facilitators available for the study combined with the large number of independent variables, leads to a considerable “inflation” of the co-efficient of multiple correlation. Because of the lack of previous research and documentation in this area, some of the variables employed are highly experimental and do not have supporting information as to their validity and reliability.

A limited number of facilitators, combined with large number of independent variables.

The results of this study are intended only to provide other researchers with a more specific basis for establishing hypotheses regarding factors in the effectiveness of facilitation of the cps process. The data from this study could be combined with data from future groups in order to provide a larger sample; this would be limited by possible cohort differences.

Lack of previous research and documentation.

Several other environmental factors also limited her ability to draw conclusions clearly from the results. The Cs courses were taught simultaneously by several team teachers in a large room. The small groups came together occasionally for large group instruction. Thus the researcher had no way of preventing different groups from influencing one another. Secondly, each group was instructed by a team teacher and an undergraduate facilitating assistant; the influence of the undergrad assistant was not assessed. (Foucar-Szocki, 1982, p.88)

For purposes of this study the area of person dealt with the aspects of personality, attitudes, self-concept and the demo-graphic variables of age and sex.

The area of process was defined as formal learning and directed study (those areas of knowledge relating specifically to the CPS process).

Press was defined as the interaction of the facilitator with his/her students, based specifically on observations using cps criteria.

Finally, there area of product was defined as those related experiences the facilitator has had as measured by the Facilitation Survey as well as their production and their students production on the TTCT, an instrument designed to measure creative thought through scoring of fluency, flexibility and originality. (Foucar-Szocki, 1982, p.59)

The 4 P's

- Person: Aspects of personality, attitudes, self-concept and demographic variables of age and sex.
- Process: Formal learning and directed study.
- Press: Interaction between facilitator and students.
- Product: Related experiences the facilitator had as measured by the Facilitation Survey.



<http://www.buffalostate.edu/centers/creativity/>

WHAT WERE THE QUESTIONS AGAIN?

1. What is the correlation of each independent variable with each dependent variable? Are these correlations significantly different from zero?

Specific statistical information to answer this question is presented in Table 26. Which indicates the correlations of Each independent variable with each of the four dependent variables. None of the independent variables were significantly different from zero when correlated with the dependent variable drop-out percentage rate.



Are you an effective facilitator?

Those independent variable which were significantly correlated with the dependent variable TTCT verbal post-test score were TTCT-verbal pretest, encouraging divergent production and the self-confidence and individuality sub-factors of the Khatena-Torrance Creative Perception Inventory. The dependent variable TTCT figural post-test score had significant correlations with age, adjective checklist, Domino Creativity Scale, TTCT pretest Verbal and the KTCPI sub-factor self-confidence. The final dependent variable, Supervisor's Ranking, had significant correlations with the independent variable sex, number of CPSI's attended, providing and receptive environment, encouraging divergent production and the KTCPI sub-factors disciplined imagination and individuality.

2. For each dependent criterion variable, what set of independent (predictor) variables will constitute the optimum predictors?

Table 24 summarizes the optimum sets for each dependent variable. The optimum set for each of the four dependent variables consisted of ten independent variables.

Those variables included in the optimum set for Supervisor's Ranking are: encouraging divergent production (FCTOS); disciplined imagination (WKPAY); the number of CPS Institutes (CPSI) attended by the facilitator FS; acceptance of authority; initiative; individuality; environmental sensitivity and the facilitator group verbal pretest total score (TTCT).

Those variables included in the optimum set of group figural posttest scores are: the facilitator group verbal pretest total score; self-confidence; encouraging divergent production; the number of related readings from a selected list of literature in the field of creativity read by the facilitator; number of CPSI attended by the facilitator; Adjective Checklist total score; intellectuality; environmental sensitivity and sex.

Those variables included in the optimum set for Group Drop-Out Percentage are: encouraging divergent production; the sex of the facilitator; inquisitiveness; What Kind of a Person are You total score; the facilitator's age; providing a receptive environment; artistry and the number of CPSI attended by the facilitator.

(Foucar-Szocki, 1982, p.76)

Reference:

Foucar-Szocki, D. (1982). *Possible predictors of effectiveness in the facilitation of creative problem solving*. Unpublished master's project, State University College at Buffalo, Interdisciplinary Center for Studies in Creativity, Buffalo, NY.