A study was conducted to: (1) Continue the investigation of a new approach to measuring the affective dimension of experience, and (2) Present a description and documentation of the affective impact of the Urban Arts Program of the Minneapolis Public Schools. The procedure classifies and evaluates information gathered in the form of diaries; it is called the PROSE System, i.e. Personal Reports of Subjective Experiences. The scoring procedure is as follows: (1) analysis by the reader, (2) independent analysis by two scorers, (3) assignment of each statement to pre-established Content Categories, (4) scoring of the affective orientation of the statements, and (5) Clinical analysis of weighted affective ratings. It was found that the experience in general had a favorable impact on its participants. (CK)
The Quantification of Subjective Data for Evaluation of Affective Experiences

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The purposes of the study were twofold: 1) to continue an investigation of a new approach to measuring the affective dimension of experience, and 2) to present a description and documentation of the affective impact of the Urban Arts Program of the Minneapolis Public Schools. The study was an attempt to measure the quality of, and to quantify the affect that accompanied the artistic experiences provided through the Urban Arts Program.

Background and Rationale

The belief has long been prevalent among artists, humanists and educators that humanistic experience is incapable of being quantified: that to define an experience with a number is to destroy the essence of the experience. After years of questionable evaluative practices, the arts have grown wary of any kind of measurement. The artists and humanists are convinced that in the affective domain measurement is a foreign, negative factor. The convictions which this paper will characterize as misconceptions are based on years of "mal-treatment" by cognitive tests -- instruments that can measure only superficial aspects of most humanistic experience. Their resistance has hardened also because they perceive as inadequate the levels of personal involvement that are tapped when "objective" instruments are employed -- however sincerely the instrument addresses the challenge.

The term "projective" has long been used to describe various methods and approaches developed to facilitate an understanding of the "private world" of an individual. The hypothesis underlying the use of the term was much the same as that which led Freud to codify "projection." Various materials and symbolic vehicles have been used to gather data of a projective nature: ink blots, pictures, sentence and story completion exercises, finger painting, drawing, doll or block play, and diaries are some of the sources of insight into the private world of humans. One characteristic these symbolic vehicles have in common is that they are usually open-ended -- unstructured enough to allow a person to reveal
the depth of his personal involvement. This characteristic enables the participants to endow the experience with subjective perceptions.

Content analysis of these perceptions enables researchers and clinicians to chart humanistic experience. Although a large number and variety of psychological variables can be measured through content analysis: needs, values, attitudes, stereotypes, authoritarianism, ethnocentrism, creativity, etc. -- the technique has seen only limited use in educational research and evaluation.

PROSE, the system described herein, used diaries as the data gathering technique. Allport recognized the value of diaries in psychological and educational research:

"The spontaneous, intimate diary is the personal document *par excellence*. In it the author sets down only such events, thoughts and feelings as have importance for himself... The diary is unexcelled as a continuous record of the subjective side of mental development... The turning points in a life are exposed to view, set, as they ought to be, in the everyday frame of unaccentuated routine. (1942, p. 95)

The procedure to be discussed classifies and evaluates information gathered in the form of diaries whose anonymity is guaranteed. The system is described, and the results of an application of the system are presented.

The PROSE System

PROSE (Personal Reports of Subjective Experiences) was developed to provide: 1) continuous monitoring of experimental effects (such as experiencing an innovative curriculum); 2) measurement -- over time -- of individual's affective reactions; and 3) clinical description, and documentation, of the quality of those reactions in the affective domain. The PROSE technique asks subjects -- in a relatively unstructured fashion -- to keep a daily diary (PROSE Daily Journals) in which are recorded comments on their experience. The commentary may include almost any facet of the subject's daily experience. The PROSE system may also invite the participant to attend to general topics important to the investigation. Respondents mail the Journals to a processing center at the end of each week. At the center, "readers", "feedback writers", and "scorers" initiate the analysis of the Journals.

The subjects are assured that their responses will not be made available to the sponsors of the program. To insure their anonymity they write under self-selected "code names". (Their real names are known only to investigators
who are independent of the program.) PROSE readers and feedback writers
know the subjects only by code-names, and scorers know the subjects only by
identification numbers. Student comments in the evaluation report carefully pro-
tect the anonymity of the participants.

During a program, students are periodically provided motivational feedback from the anonymous feedback writers. These writers are trained to follow procedures developed to establish a "relationship" with the code-named writer and yet prevent feedback comments from biasing later Journals.

The analysis of the diaries is based on two assumptions. First, the comments subjects choose to volunteer in Journals concern matters of some interest, meaning, or value to them as individuals. (The opposite is not assumed; an unmentioned experience may well have had some degree of impact.) Second, the dimensions of the experience which are to be measured have been selected in advance, are mutually exclusive, and are unknown to the respondents.

The scoring procedure is as follows:

1. Analysis by the "reader" to select from the Journals all "quotations" relevant to the study.

2. Independent analysis by two scorers of each "quotation" into one or more "statement" units;

3. Assignment of each "statement" to pre-established Content Categories;

4. Scoring of the "affective" orientation or tone of the statements; and

5. Clinical analysis of weighted affect ratings.

This procedure produces group scores for each Content Category and for the program as a whole. The resultant affect score is called the PROSE Affect Rating (PAR). Figure 1 shows the interpretation of the PAR scores. The descriptors -- from "Extremely Poor" to "Excellent" -- are offered to facilitate interpretation of the numerical scores. The higher the score, the more favorable the affective reactions. The scale was designed to fall within the range of familiar report card grades. Scores of 60 and higher are positive; scores below 60 are at least partly negative. The scale is not a standard score scale, nor does it purport to represent equal intervals.
Description of Program

The Urban Arts Program (UAP), financed by an ESEA Title III grant, consisted of some 15 workshops in various arts for selected students from the Minneapolis private and public secondary schools. For part of each day, the students left their schools for courses in Urban Arts. These courses earned credit for graduation in the Minneapolis Public Schools.

In essence, the UAP represented an effort to provide talented and interested students an opportunity to develop the understanding that comes from creative expression. For those students desirous of an artistic career, as for all the participants, UAP afforded the unique opportunity of working with artists and artist-teachers at a professional level usually beyond that of most Junior and Senior High Schools.

Sample

In each of ten workshops, three students were randomly selected to participate in the PROSE evaluation. The workshops that were sampled for the study were:
Film, Photography, Folk-Rock Blues, Museum Arts, Theatre, Creativity, Poetry and Songwriting, Architecture, Dance, and Contemporary Dance and Ballet. One participant resigned from the program after two weeks, one never responded to PROSE, one was absent for eight weeks, and one entered the program during the fifth week of the study. Replacements were made for two of these, and the final sample consisted of 28 students.

Procedures

The participants were given The PROSE Daily Journal for 12 weeks during the program. The only directions given to the students were to report "reactions to -- and feelings about -- each day of my life this week, both as an individual and as a participant in the Urban Arts Program." In addition each week students were asked to comment on the following points:

1. the one thing that meant the most to them all week;
2. the most important ways in which the program affected their growth as artists; and
3. the most important ways in which the program affected their activities at their home schools.

Data Analysis

Selecting Quotations. One hundred sixty-four weekly issues of the PROSE Journal were received. Two-thirds of the issues were received from students who completed Journals for more than six weeks in the 12 week study. The reader of the UAP PROSE study selected 917 quotations from the weekly issues of PROSE Journals which were returned. The mean number of quotations per subject was 32.7. The selection of quotations taken from the journals was extensive (i.e., little or no relevant data was left in the Journals.)

Scoring of Statements. In the PROSE system, the statement, rather than the quotation, is the unit of analysis. In this study, the two scorers determined independently the number of statements in each quotation. One thousand and seventy-three statements were identified within the quotations. The mean number of statements per subject was 38.3.

Statements were assigned to one of the mutually-exclusive content categories, and the affect score (PAR) determined. The PAR Score was determined by rating each statement in terms of its affective tone. Five main affective levels have been identified:
a) statements with positive affect,
b) statements with ambivalent affect,
c) statements with negative affect,
d) statements without any affect
e) statements with psychopathological affect

Under this schema each level of affect rating is weighted by numerical factors which transform it to the PAR score scale.

Content Categories. The Content Categories for this study were specifically designed for this evaluation with representatives of the Urban Arts Program, Minneapolis Public Schools, and the Minnesota State Department of Education. The Content Categories for this study were as follows:

Artist--Artist-Teacher - This category received all data volunteered concerning the Artist-Teachers of the Urban Arts Program. It also included comments made about visiting artists.

Peer Group Relations - This category included all of the statements made by the participants referring to their peers.

Environment - Any statement made in reference to the physical setting and/or the resultant psychological atmosphere that oriented the program's experiences was classified in this category. This category also received statements made in reference to transportation.

Student Role - This category was defined by any statement made by the participants in reference to any subjective confirmation of growth or difficulty. Most of these statements were introspective in nature.

UAP Events - This content category gathered all comments volunteered in reference to any actual educational experiences or events of the Urban Arts Program. This information was further analyzed in terms of eight specific sub-categories: 1) Art, 2) Architecture, 3) Creative Writing, 4) Dance, 5) Drama, 6) Film, 7) Museum Arts and 8) Music. These subcategories do not refer to specific workshops, but the artistic experiences common to many of the workshops.

Home School - This category included all statements made by the participants concerning their Home School.

Other UAP Events - This content category gathered all of the statements made about artistic and educational experiences or events beyond those of UAP. These included concerts, museum trips, theater, dance performances and poetry readings freely attended by the student; experiences not required nor a formal part of the Urban Arts Program.
As mentioned earlier, subjects were not aware of the Content Categories. They did know that their Journals were to be used somehow to evaluate the UAP. This awareness, together with the "Hawthorne effect" generated by participation in the evaluation, may be alleged to have influenced the affect toward the positive. However, since the participants were free to report (or not to report) on any experience in an unrestricted manner, and since the specific categories were not known to them, it is believed that bias was at least minimized if not eliminated.

Inter scorer reliability. As noted above, two independent scorers were used to evaluate the data. Three indexes of inter scorer reliability were determined by computing the percentage of agreement on the scoring of content category, affect, and category and affect combined. The results are shown in Table 1. The very high percentages of agreement, even when category and affect score are combined, demonstrates the reliability of the scores generated by PROSE data.

Table 1
PROSE Inter-Scorer Reliability

<table>
<thead>
<tr>
<th>Number of Statements (1054)</th>
<th>Scorers Agreed</th>
<th>Scorers Did Not Agree</th>
<th>Percent of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category Score Agreement</td>
<td>949</td>
<td>105</td>
<td>90</td>
</tr>
<tr>
<td>Affect Score Agreement</td>
<td>919</td>
<td>135</td>
<td>87</td>
</tr>
<tr>
<td>Category and Affect Score Agreement</td>
<td>847</td>
<td>207</td>
<td>80</td>
</tr>
</tbody>
</table>

Note. -- The discrepancy between 1054 statements and the total of 1073 statements reported earlier is explained by the fact that 19 additional statements were included from Journals received after the reliability was computed.
Results

PAR for the Total Program. Any personal report of experiences can be considered as an indication of how the student perceives the affective or humanistic dimensions of his participation in the program. PROSE collects these affective perceptions over a period of time (in this case 12 weeks), and translates these reactions to a PROSE Affect Rating. The reactions to UAP suggest that the experience, in general, had a very positive, and indeed almost overwhelmingly favorable impact on the participants.

The participants' reactions within each Content Category and the total program are displayed in Table 2 and Figure 2. The PAR of 82 for the total program can be considered exceptionally high, considering the depressing effect of the low scores received by two of the seven content categories. The overall rating for the program was in the "excellent" range of the PROSE Affect Rating Scale.

PAR's for the Content Categories. The discussion hereafter summarizes the results shown in Table 2 and Figure 2. Two representative excerpts from the large number of comments in each Category are presented to portray qualitatively the category under study. Clinical analysis of each Category is more in-depth and contains more excerpts than can efficiently be presented at this time. An example of the complete analysis of one category is presented in the Appendix. The complete report was presented to the Urban Arts Program.

Content Category "Student Role" received the highest PROSE Affect Rating (PAR=91) indicating that the Program fostered increased self-perception, a greater depth of meaning and involvement in the students' chosen interests, and positive attitudes towards their skill development. Indeed, the amount of positive testimony gathered by PROSE about the changes in role perception is probably the best indication and description of the success enjoyed by, and the impact directly attributable to, the Urban Arts Program.
Table 2

PROSE Affect Rating (PAR) of the Total Group
For Content Categories and the Total Program

<table>
<thead>
<tr>
<th>Content Categories</th>
<th>Number of Students Responding</th>
<th>Percent of Students</th>
<th>Number of Statements</th>
<th>PAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Peer Relations</td>
<td>21</td>
<td>75</td>
<td>78</td>
<td>63.0</td>
</tr>
<tr>
<td>II. Artist-Teacher</td>
<td>22</td>
<td>78</td>
<td>121</td>
<td>86.8</td>
</tr>
<tr>
<td>III. Environment</td>
<td>15</td>
<td>56</td>
<td>41</td>
<td>78.0</td>
</tr>
<tr>
<td>IV. Student Role</td>
<td>24</td>
<td>86</td>
<td>213</td>
<td>91.0</td>
</tr>
<tr>
<td>V. Home School</td>
<td>19</td>
<td>67</td>
<td>98</td>
<td>41.0</td>
</tr>
<tr>
<td>VI. UAP Events</td>
<td>28</td>
<td>100</td>
<td>466</td>
<td>86.6</td>
</tr>
<tr>
<td>VII. Other UAP Events</td>
<td>14</td>
<td>50</td>
<td>56</td>
<td>81.5</td>
</tr>
<tr>
<td>Total Program</td>
<td>28</td>
<td>100</td>
<td>1073</td>
<td>82.0</td>
</tr>
</tbody>
</table>
The following excerpts* are illustrative of the concerns and quality of insight and growth that characterized this content category:

"This is the first real commitment I've made to anything, no matter what happens, I always go to UAP...I never had any self-discipline before this."

"U.A. has opened many insights in me that would never have been possible in my high school. At U.A. you work with stimulating people that share common interests."

*All excerpts taken from the PROSE Journals are quoted exactly as written by the student -- including grammatical errors and slang. However, any identifying features have been omitted. At the discretion of the investigators certain words and phrases not ordinarily judged acceptable in the context of a formal report have been excised.
That the students were impressed by, and respectful of the talent, artistry, and teaching abilities of the UAP teachers was much in evidence in the data—a fact reflected in the PAR score of 86.8 for the category "Artist--Artist-Teacher."
The main factors that many chose to comment on were the availability, friendship, informality, talent and commitment of their teachers. Most of the students evidenced a high respect for their teachers, not as "authority" figures but as talented artists from whom they were learning a great deal.

"In U.A. we had ___ as a teacher. I really like her ____ she's a good teacher, too. ...I can't understand how one teacher (from U.A.) could spend so much time with all of us (about 40) -- I mean she gives each of us the attention we need, which must be awfully hard."

"I really like ___ more each day I have a hard time thinking of him as a teacher, according to the concept that I've gotten over the past years. It is too bad that all education can't be conducted like U.A., where the teacher is just a friend, who is willing to share his knowledge with you. Maybe some day."

PROSE data in this category indicated that the concept of having an artist, as an expert in his field, teach his craft in an environment like UAP (one conducive to freedom and creativity) was among the most successful dimensions of the project.

The "Urban Arts Events" Category processed data concerning the various offerings of the program. Analysis of this category revealed an overwhelming amount of positive reaction to the experiences that defined the Urban Arts Program. Of the 466 statements volunteered for this category, only 7% were negative. The PAR of 86.6 demonstrates a very favorably received program of offerings, philosophy of approach, and methodology.

"Today we did "improvisations" for the first time. Three small groups had to get up in front to interpret "special problems"... At the end of the hour we experienced being a group for the first time. It was a strange but wonderful feeling..."

"Even though it was a holiday, I went to U.A. anyway. I love dance so much that I don't mind getting up at 6:30 a.m. on a holiday to attend!"
The Content Category "Home School" collected all data related to the student's home school, often in comparison to the UAP. There was a large amount of discussion offered in the PROSE journals that presented the home school in an unfavorable light. The areas of criticism ranged from school policy, teachers, and educational philosophy, to specific classes and lessons. Students were quite outspoken as is revealed by these excerpts from PROSE:

"It (U.A.) is making me more aware of the problems that may someday destroy my home school -- the feelings that the students are s____ and of no value, but the teachers get all the power to tell the kids things -- and the parents can be insulted by a teacher... kids and parents should be the ones who demand to rule what goes on."

"High School, you send me with your fantastic lies... You know you just tire of the games more than anything else; the roles, the way you have to manipulate and perform so convincingly, just to get by..."

The majority of the responses contained severe criticisms of the home schools. The PAR received by the "Home School" category was 41 -- lowest of all scores in the study. The contrast between the scores for this category and those more directly concerning the Urban Arts Program provides further evidence for the sensitivity of the PAR scale.

The "Peer Group Relations" Category revealed that hostility, mistrust, and aloofness characterized many of the peer relationships during the first few weeks of the program. As the weeks progressed much of this negativism found its resolution in the development of the program. This category had the second lowest PAR score (PAR=63). However, there were substantial gains made after the first weeks of the program and the data indicated that more beneficial, helping relationships existed among students at the conclusion of the program.

The range of impressions in the "Peer Group Relations" Category extended from criticism of particular individuals, as evidenced by this excerpt --

"I got kind of mad at a friend of mine -- she's been here (U.A.) five out of 10 times. I told her it's not fair to do it half-way..."

to a kinship developing with their peers as the program progressed --

"The thing that meant the most to me is the way all the students are trying to help each other now."
The Content Category "Environment" gathered statements volunteered about the physical and psychological environments of the program. The data included references to transportation within the program, and the atmosphere of the various centers and buildings that housed the project. The data revealed that most students reacted very positively to the environment of the program. Some seemed to gain inspiration from their surroundings. Others sought the locale as a safe escape from their home school. Many found it to be highly adequate for their expressions and development. There was a sense of security and closeness that the premises seemed to perpetuate. The category earned a PAR of 78. Among the comments were:

"...I guess you could say it's a refuge for me and many others from the drag of school. It's more home, more comfortable and warm."

"The place I got to is really nice. It has such a relaxed atmosphere... it isn't one of those high-class places -- that's what I like about it."

The "Other Urban Arts Events" category was concerned with an analysis of those experiences beyond those of the assigned workshops and beyond those sponsored by UAP, experiences probably "triggered" by participation in the program. It was an attempt to discover the immediate carry-over effect of the program upon the free-time and life styles of the participants.

"...my ma said to take time out (from homework) and have fun, so I went down to the library and got an art book. I had a riot wandering around and looking at pictures."

It appeared from the data that, due to UAP, the students had a greater appreciation of these extra UAP experiences and demonstrated an ability to make critical judgments and distinctions about the quality, craftsmanship and/or the artistry involved.

"Today we attended a rehearsal of the theatre workshop... boy, those kids were... experts -- such spirit. Maybe it was that that fascinated me. Anyway, as I left I was thinking it was better than my course, Museum Arts... (however, when I compared it) to the quality of works of Art we study, I saw that we have the same spirit, color, movement and philosophy etc."

This category earned a PAR of 81.5.

Conclusions

The personal and subjective data collected by PROSE diaries has described the affective impact of a particular model for providing experiences in the arts
to urban students. Through its present state of development PROSE has demonstrated a new approach to quantifying affect. Affect is used as a synonym for emotion or psychic energy. It is understood to be a necessary concomitant of any expression, for it is the "power" source that informs, colors and drives the communication. Based upon this assumption the PROSE system offers new direction to the field of measurement of affect -- of humanistic concerns, which are generally considered most resistant to traditional objective approaches in measurement. The system can assist the educational process by allowing programs to serve affective needs and interests, as well as cognitive needs.
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This Content Category collected all data related to the student's home school, often in comparison to the UAP. There was a large amount of discussion offered in the PROSE journals that presented the home school in an unfavorable light. The areas of criticism ranged from school policy, teachers, and educational philosophy, to specific classes and lessons. Students were quite outspoken as is revealed by these excerpts from PROSE:

"I am not as satisfied with my home school as I used to be. Probably because it seems like a piece of drab, dingy, grey cloth, as compared with a piece of a magic flying carpet (U.A.P.). (Catch the metaphor?)"

"It (U.A.) is making me more aware of the problems that may someday destroy my home school--the feelings that the students are s___ and of no value, but the teachers get all the power to tell the kids things--and the parents can be insulted by a teacher...kids and parents should be the ones who demand to rule what goes on."

"High School, you send me with your fantastic lies... You know you just tire of the games more than anything else; the roles, the way you have to manipulate and perform so convincingly, just to get by..."

"Many teachers don't realize how sensitive students are--they need to know a teacher and the teacher know them. But instead we get tossed back and forth between teachers for the administration's convenience--no regard for the students' feelings. It's depressing."

"...high school has become nearly intolerable due to the boredom it centers around."

The students reported on friction that seemed to gradually develop between some of their home schools and the UAP:
"...a lot of the teachers and administrators at high school frown upon U.A., because it offers an alternative, which they cannot figure out...preferred over high school...Public school is jealous of the response U.A. gets just by being U.A."

"I also get a lot of s____ from the (home school) teachers who don't like U.A. school. But that's their own problem."

"It's funny, the teachers at my high school don't take (U.A.P.) seriously. They think...we go there just for fun and want to be lazy. I find this attitude again and again..."

"They have started a new thing at high school and it really makes me sick...they are not going to give us credit if we are not there (high school)--excused or not!"

The antagonism that was developing is a very real problem that, unless resolved, could have serious consequences for the future of the UAP.

There was evidence, however, that some students became more tolerant toward their home school as reflected in these excerpts:

"I guess the Public School System isn't such an archvillain."

"...U.A. makes me hate school even more, but it also gives me a little hope that maybe they'll learn from U.A."

"I think my negative reaction toward high school after my exposure to U.A. is beginning to stabilize."

It seemed that the participants gained insights into educational philosophy as a result of their exposure to UAP. They became more aware of the flaws in their home school, because it seemed, in many cases, to be a direct contrast to the philosophy behind the UAP.
"I feel more dissatisfied with high school than I ever have before...Where the authority factor is ever-present and assumes that they know what they expect from anyone. A constant feeling of restriction, indoctrination, etc., has been apparent to me for some time in high school. I believe that a certain amount of spontaneity in learning is vital and has been sadly eliminated from the high school atmosphere...I find my high school experience rather boring and unproductive. I no longer feel like adapting to their rules to get grades even if it may play important part in my future."

Although most of the data were critical of the high school, there was some indication that some students were able to coordinate interests and activities of UAP with the home school. This is evident in the following excerpts from PROSE:

"I am the choreographer of our high school play. Pretty large promotion from costume-maker wouldn't you say? I'm flattered, but that's in the Drama Department..."

"I am more aware now of the basic differences in styles of enforcing learning, and I think this experience will help inform me and help me decide what I think about education."

"I worked on a project jointly with my U.A. and high school classes. It was productive."

"We are doing a play in school and I can transfer all my knowledge into that play."

Positive references were made to a high school philosophy course, an English teacher, and some isolated courses in history and algebra as being outstanding and in keeping with the impact level of U.A.P.

In at least one instance, the distance noted by the students between their UAP experiences and those of their Home Schools found a natural resolution. Early in the study a student reported:
"Since my U.A.P. class is so different from anything I do at my high school, I can't compare it. My U.A.P. experience certainly affects me and my personal development but not at all in what I am doing in high school..."

Later in the study she reported:

"...my school day doesn't seem as long as before and I always look forward to U.A...my whole day is nicer because of U.A.P..."

Still later she commented:

"At (high school) we have to work out something for my Humanities class and then give a presentation...The teachers of my Humanities class have allowed me to report in my (U.A.) interest. This is great for now I can read about (U.A. interest) more deeply and get help and directions from my U.A. teacher."

And finally she wrote:

"...now my Humanities class at (high school) is closely related to my U.A. experiences and thoughts. Right now I'm reading "Zorbo" and I believe that I can understand this man's personality much better now because of my U.A.P. involvement and interest..."

In conclusion, although there was some indication that students saw a relationship between U.A. and their home school, the majority of the data were concerned with severe criticism of the high schools. The PAR received by the "Home School" category was 41--lowest of all scores in the study.