This summary of a presentation made at the Adult Education Research Conference in Minneapolis, Minnesota, February 27-28, 1970 deals with an evaluation research project undertaken at the Remscheid Academy for Free Creative Art Expression and Media Education. This institution aims at education and training of present or future adult educators and youth leaders. Course participants, who are between 18 and 26 years of age, are instructed by seven trained artists. Evaluation was attempted through a series of measures of attitude change, to determine the effect of three short courses and one semester-length course in introducing a positive approach towards a progressive type of art education. A Thurstone- and Likert-type rating scale were used, as well as a 20 item multiple choice test. A more extensive report of the research is to be published by the Adult Education Department, University of Leuven (Louvain), Belgium. (MF)
LEIRMAN, WALTER  EVALUATION OF ATTITUDE change through creative art and
expression courses in Remscheid (W. Germany).

The present abstract briefly summarizes the Setup and the results
of an evaluation research project carried out in the "Akademie Remscheid
fur Musische Bildung und Medienerziehung", i.e. the Remscheid Academy
for free creative art expression and media education. This institution,
which aims at the education and training of present or future youth leaders
and adult educators and in which seven trained artists instruct and
animate course participants between 18 and 26 years of age, is of its
kind unique in Europe.

After a pilot-study in August 1968, where we used a before-after
measurement technique, complemented by participant observation in each
of six workgroups, the research project started with courses Nrs 130 and
131 in April 1969. The project will cover one year of course-work.
So far, three short "basic" courses (3-4 weeks) with a total of 114
participants and one "semester-course" (4 months) with 23 participants
have been investigated, and the larger part of the results are available.
A first extensive report titled Musische Bildung in Remscheid I. Eine
Ergebnisuntersuchung, will soon be published by the Adult Education
Department of the University of Leuven (Belgium) to which the author
belongs. The general design consists of what we have called an ANTE-
META - POST measurement, involving Ante- Meta- Post questionnaires and
a specially constructed Ante - Meta test.

Attitude change was measured through a Thurstone - and Likert-type
rating scale and a multiple-choice question containing 20 items. These
two tasks were administered without any change immediately before (ANTE),
immediately after (META) and three-four months after the course (POST).
Changes in attitude were tested by use of such distribution-free tests as Wilcoxon's matched-pairs signed-rank test and the sign-test. The results were compared to those obtained from a control-group on the same research instruments.

Thus far, the three "basic" courses have shown a positive change in attitude towards a progressive type of art education directly after the course (META) whereas the longer semester course showed a negative change in attitude away from the traditional, somewhat romantic concept of creative art education. However, the only POST - measurement carried out on the first basic course shows no significant change when compared to the ANTE-measurement. Apparently, the course-effect was not strong enough to make the change permanent. The test specially constructed for our study, called TELOTEST, aimed at evaluating the change in participation goals (Gr. teios = goal) from ANTE to META through POST.

In ANTE and META, it consisted of a restricted or balanced incomplete pair-comparison design (Mosteller's $X^2$-test for goodness of fit was applied with good results in every case), a positive-negative preference rating (sign-test), and a goal-discussion test ($t$-test and analysis of variance). In POST, where the only instrument available was a mailed questionnaire; we only used the positive-negative preference rating. The results indicate that the goals with either high or low ANTE-ratings were generally not significantly affected by the course, whereas the intermediate goals either gained or lost significance. On this test, the control-group again showed almost no significant change. Repetition of this TELOTEST in other settings, with other kinds of items, could lead to further refinement of this technique. Full details, including tables, will be given in the paper.
The present abstract briefly summarizes the general organization and the results of an evaluation research project, carried out in the "Akademie Remscheid für Musikische Bildung und Medienerziehung", i.e. the Remscheid Academy for creative art expression and media education. This institution aims at the education and training of present or future youth leaders and adult educators; in it, seven trained artists instruct and animate course participants between 18 and 26 years of age (generally). It is of its kind unique in Europe.

After a pilot-study in August 1968, where we used a before-: after measurement technique, complemented by participant observation in each of six work-groups by 9 of our students, the present research project started with courses Nrs 130 and 131 in April 1969. The whole project will cover one year of course work.

So far, three short basic courses (3-4 weeks) with a total of 114 participants, and one semester-course (4 months) with 23 participants, have been investigated, and the larger parts of the results are now available. A first extensive report, titled Musische Bildung in Remscheid I. Eine Ergebnisuntersuchung will soon be published by the Adult Education Department of the University of Leuven (Belgium), to which the author belongs. The general design consists of what we have called an ANTE-META-POST measurement, involving Ante-, Meta- and Post-questionnaires, and a specially constructed Ante-Meta-Post test.

Attitude change was measured through a Thurstone- and Likert-type rating scale concerning four current definitions of creative expression education, and a multiple-choice question containing 20 word-items. The four definitions represented four different tendencies, from the romantic-reformist to the progressive-renewal
This classification was done by four independent judges. These two tasks were administered with almost no change, immediately before (ANTE), immediately after (META) and three-four months after the course (POST). Changes in attitude were tested by such distribution-free tests as Wilcoxon's matched-pairs signed-rank test, (Vs) and the sign-test. The results were compared to those obtained from a control-group on the same research instruments. Thus far, the three "basic" courses have shown a positive change in attitude towards the "progressive" type of art education advocated by most of the instructors, directly after the course (ANTE-META comparison). The longer semester-course showed a negative change, in that it significantly moved away from its ANTE-ratings of the traditional, somewhat romantic concepts of creative art education. However, the only POST-measurement carried out on the first basic course, shows no significant change when compared to the ANTE-results (ANTE-POST comparison). Apparently, the course-effect was not strong enough to make the change permanent. In the meantime, the control group showed no change at all. The results obtained from the multiple choice task confirmed the same trend.

The test specially constructed for our study, called TELOTEST, aimed at evaluating the change in participation-goals (Gr. télos = goal) from ANTE to META through POST.

In ANTE and META, it consisted of

1) a restricted or balanced incomplete pair comparison design containing 13 goal statements, written in behavioral terms

2) a positive-negative preference rating of the same 13 goal statements

3) a goal-discussion test of 20 statements (including the original 13) with groups of 4 participants.

The significance tests applied were,
for test item (1): Mosteller's Chi-square-test for goodness of fit
(with positive results in every case thus far)

for test item (2): the sign-test

for test item (3): t-tests per statement, Kruskall-Wallis analysis of
variance for all courses.

In POST, where the only instrument available was a mailed questionnaire, we
only used the positive-negative rating (item 2). Results of the 3 items were
correlated (Spearman-rank test), so as to gain information about the validity of
the test. We obtained very high correlations for items 1 and 3 in every case,
where as the coefficients obtained from correlating item 2 with the two other
ones varied from -.32 to .91.

ANTE-META comparisons of Telotest (1) and (2) indicate that the goals with
either high or low ANTE-ratings were generally not significantly affected by the
course, whereas the intermediate goals either gained or lost significance. On
this test, the control-group again showed almost no change.

In a forthcoming publication, the discussion of this specific research project
will be preceded by two chapters on theory (models, systems and units) and design
of evaluation research. The following chart briefly illustrates how we tried to
link theory and practice in one project.
<table>
<thead>
<tr>
<th>Systems &amp; Units</th>
<th>Proposition</th>
<th>Hypothesis</th>
<th>Instrument</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>USER SYSTEM</td>
<td>Participation in course leads to change in attitude towards creative expression</td>
<td>Attitude will be changed at the end of the course as measured by 9-point scale of 4 different definitions and by ranking of same BEFORE and AFTER course. The change will be maintained in every-day life.</td>
<td>Questionnaire; 9-point rating scale from 1 (lowest importance) to 9 (highest importance)</td>
<td>Wilcoxon’s Matched-pair ranked sign test ($V_s$)</td>
</tr>
<tr>
<td>* attitude towards</td>
<td></td>
<td></td>
<td>Questionnaire: ranking of 4 definitions in order of preference from 1 (highest importance) to 4 (lowest importance)</td>
<td>Sign-test</td>
</tr>
<tr>
<td>creative expression</td>
<td></td>
<td></td>
<td>Questionnaire: self-report regarding practice, specific nature, private or group</td>
<td>Sign-test</td>
</tr>
<tr>
<td>* skills at</td>
<td>Course-related practice will reach high level in everyday life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARNING SYSTEM</td>
<td>The participation-goal system of the users will be changed at the end of the course</td>
<td>The users' participation-goal system, as measured by pair comparison; dichotomization and goal discussion of 13 statements of objectives, will be altered at the END when compared to the BEGINNING of the course. Discussion will produce a greater change of opinion as measured by TELOTEST at the END than at the BEGINNING.</td>
<td>TELOTEST A: pair comparison; TELOTEST B: positive-negative classification; TELOTEST C: goal rating and discussion plus new rating</td>
<td>Mosteller's Chi-square for pair comp.</td>
</tr>
<tr>
<td>*objectives in</td>
<td></td>
<td></td>
<td></td>
<td>T-test</td>
</tr>
<tr>
<td>participation</td>
<td></td>
<td></td>
<td></td>
<td>Kruskall-Wallis Anova</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Kruskall-Wallis Anova</td>
</tr>
</tbody>
</table>

**ERIC Clearinghouse**

**AMR 6 1970**

**on Adult Education**

The participants will use discussion as a tool of opinion change with more effectiveness at the end of the course.