status report and current activities.

At the end of the first nine months of the American Institutes for Research (AIR) project to revise and field test the Comprehensive Career Education Model (CCEM) curriculum materials, activities are proceeding on four fronts. A coding of 61 curriculum units on a lesson-by-lesson basis has been completed and a content analysis is now being carried out. Five units have been carried through initial revision and another batch of 15 units will be revised following dialogues with publishers to obtain publisher requirements. Teachers have been trained and provided with evaluation instruments for field testing the first batch of revised units. Dialogues are being carried out with publishers who are interested in bidding on the materials that eventually will be produced in the project. (Author/PR)
Status Report and Current Activities

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At the end of the first nine months of the AIR project to revise and field test CCEM curriculum materials, activities are proceeding on four fronts. A coding of all 61 units on a lesson-by-lesson basis has been completed and a content analysis is now being carried out; five units have been carried through initial revision and another batch of 15 units will be revised in the next three months; teachers have been trained to field test the first batch of revised units by the end of May; and dialogues are being carried out with publishers who are interested in bidding (by 15 May) on the materials that eventually are produced in the project.

Coding and Content Analysis

The 61 CCEM units contain 717 lessons. One goal in revision is to partition units and to eliminate, combine, or reconfigure lessons (possibly across units) in order to obtain homogeneous sub-units of about five lessons each in which redundant content is kept to a minimum across the entire set of units.

It is no small task to determine the contents of 717 lessons, the relationship among these lessons and the relationship between these lessons and the regular K-12 curriculum. We have proceeded to accomplish this task by using a coding system that is comprised of 26 dimensions.

Of special interest to the revision team will be an analysis of the career topics or content of the units, the grouping(s) suggested for organizing the students, the learning activities utilized, and the provision for teacher options. This analysis will tell whether there is too much redundancy of content in a particular grade range, whether a specific learning activity or grouping of students is over-used in a particular grade range, and whether the flexibility is provided for the teacher in adapting the unit to his/her classes.
These were all concerns expressed by the teachers who attended the workshops at AIR in October.

In addition to reducing redundancy and providing flexibility, a goal of the revision team will be to balance the content of the units as much as possible across the spectrum of career education topics. Two models have been used. Each lesson has been coded to the CCEM model with its eight career education strands, described in an earlier paper. Each lesson has also been coded to the AIR Career Education Curriculum Topic Chart. Where the development of additional materials seems to be warranted in a particular unit, specifications will be written to extend the unit into areas of the CCEM or AIR models wherein coverage across all units is minimal or inadequate. Despite the fact that we have only 4/7 of the general career education units developed under the direction of CVE (61 of 106), we believe that our units do provide at least the nucleus for a comprehensive program in career education. An analysis of the coding results will tell us whether we are right. It will also provide the basis for our initial scope and sequence chart.

Initial Revision of Units

Since the first batch of five units was revised during the period before dialogues had begun between AIR and publishers, we wrote the first revision guidelines without any directive publisher inputs. Instead we used inputs from the school district survey and the teacher workshops along with general impressions which we had gathered from the publisher survey. The guidelines have produced revised units which may go through another revision, in terms of format, before they are acceptable to the publisher finally selected. However, we have attempted to anticipate publisher requirements.

As we now begin revising the second batch of units we have a clearer idea of what various publishers will require since dialogues with publishers are underway. Thus, our revision guidelines are being modified to reflect this knowledge. Before the second batch is completely revised in three months time, a publisher will have been selected. Hence, the second batch of units can be worked into final form according to definitive publisher specifications; and these specifications will be available before the bulk of the units, which comprise batch three, are revised.
It should be clear that we have been on least solid ground in the
revision of the first units. However, we proceeded early for four reasons.
First, we wanted to assemble a revision staff and train them on actual project
materials for which they are eventually responsible. Starting early with a
few units, we would then build momentum through successive batches. Secondly,
we wanted to be able to show prospective publishers examples of what we could
do toward improving the units. We believed that this was important to do during
the period of dialogues with publishers. Third, we wanted to implement our
field testing plans early in a limited way in order to work out the difficulties
before comprehensive field testing begins next fall. The early units will allow
us to do this. Finally, we wanted to make available to potential users a small
set of sample materials from the project. We will be printing three of these
units in quantity and distributing them at cost. We believe that such materials
are an important part of the total dissemination effort. They build early inter-
est in the project and assure a demand for the final materials. Thus, even if
it is necessary to revise these early units again because of finally settling
on a different format, we do not feel that the early effort will have been
wasted, since many ends will have been served.

Field Testing

The first units are now ready to be field tested. They will be tested
in school districts in the San Francisco Bay Area before the end of May. The
school districts are volunteer districts; however, they include both urban
and suburban schools as well as schools in middle, high, and low socio-economic
areas.

Each unit will be used in at least two classrooms by volunteer teachers.
The teachers have attended a workshop training session in which the CCEM program
has been explained, the units have been introduced, the field test instruments
have been explained, and the field test procedures have been discussed.

Instruments already developed for use include a daily log, in which the
teacher records incidents and reactions; a teacher evaluation form to be com-
pleted at the conclusion of a unit; and a teacher questionnaire designed to assess
the teacher's attitude toward and experience with career education. A student
questionnaire has also been designed to obtain measures of students' attitudes and
experiences. In addition, a career education maturity scale has been written for the students as well as a unit test for administration to the students by the teacher in a pre-test, post-test experimental design. Control classes are also part of the design.

Scores from evaluation instruments used in the pretesting and any appropriate standardized test scores will be used as covariates in analyses of covariance which will be one of our analysis techniques. Our other technique will be a content analysis of the teacher activity logs and examination of the teacher evaluation reports. The results from these two analyses will be the basis for the Unit Field Evaluation Report. This report will provide the revision staff, the publisher, and the NIE with information about the appeal, useability, and effectiveness of the unit activities.

Field testing of the bulk of the 61 units, which is planned for the next academic year, will be carried out on a national sample. Arrangements are now being made with volunteer schools in all parts of the country, balanced across urban-suburban-rural and high-middle-low socio-economic strata. Schools will also be representative of other major subdivisions in our population such as ethnic background.

The primary purpose of all field testing will be to obtain formative evaluation information. Thus, units will be given a final revision on the basis of this information before being turned over to a publisher.

Because of the particular strategy we have adopted in our initial revision, it is our hope that final revision will not be heavy. If it is the case that units do not undergo substantial change after field testing, then field testing can serve a second purpose—namely to provide summative evaluation information. This information will be turned over to the publisher of the units for use in dissemination of the final products.

Publisher Arrangements

AIR has obtained approval from NIE to have a publisher participate in the revision phase of the project. Thus, AIR has issued an RFP to publishers which encompasses development functions as well as dissemination functions. Our staff members are now carrying out open dialogues with publishers interested in submitting bids for the final field-tested and revised materials. The immediate goals of these dialogues are two-fold: (1) to smooth the way to selection of a
publisher before the end of the first project year in June; and (2) to obtain increasingly specific guidelines for revision as revision proceeds. To attain the first goal, we believe that it is important to show a potential publisher the materials as they have come to us and also to show materials which we have revised using very general guidelines, in order to demonstrate our credentials for the task at hand. To attain the second goal, we are determining commonalities that exist among the expectations expressed by various publishers with regard to final format/package/market options. Attainment of the second goal will allow us to proceed confidently with the revision effort that has already begun, with the expectation that the results will meet the requirements of the publisher finally selected.

Attainment of the first goal will give assurance that the materials will actually be published and widely disseminated, since the eventual publisher will be involved throughout the second year of the project. This publisher involvement will include at least the specification of format guidelines for us to follow in revision. Thus, we won't come to the end of the project only to find that we have materials that are unacceptable to all publishers.

Our principal concern in proceeding with publisher arrangements as just described has been to maintain open, competitive procedures. We must be able to provide assurance that no publisher is given advantage over other publishers in the bidding for the project materials. Yet, if we can guarantee this, it is our position that we can take advantage of the collective knowledge of the career education marketplace possessed by many publishers in order to produce materials that are finally widely disseminated, broadly used, and effective in the promotion of learning.