A project was conducted to provide staff development opportunities to adult education instructors so they could use the Adult Informal Measures developed at the University of Pittsburgh, with a long-range goal of creating a staff development model for the use of informal assessment in adult education programs by instructors with varying expertise and situations. The model was created and implemented at three sites, and a set of guidelines for creating staff development opportunities for all adult literacy instructors was developed. Evaluation of the model used documentation of site visits, recommendations, types of follow-up on recommendations, use of assessment materials in classroom operation, and interviews with instructors and students. The study found that learning to use informal assessment involves more than a knowledge base and assessment instruments. Instructors must understand what literacy learning is and is not before they can provide students with experiences that enable them to use their knowledge to construct meaning and assess their progress. The study concluded that instructors must do the following: know the extent of their knowledge about the purposes of literacy learning; understand how their curriculum addresses this understanding and how they can use assessment and portfolio development to create informed instruction; use the assessment instruments; and create assessment measures to suit their own teaching situations. (The project report includes guidelines for creating staff development sessions on using informal assessment and samples of assessment materials.) (KC)
A Staff Development Model For Use of a Comprehensive Assessment System in Adult Literacy Programs

By

Meryl K. Lazar & Rita M. Bean

University of Pittsburgh
Institute for Practice and Research in Education

1993

The activity which is the subject of this report, was supported in part by the U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education or the Pennsylvania Department of Education, and no official endorsement by these agencies should be inferred.

Project Co-Directors: Rita M. Bean, 5T23 Forbes Quadrangle, University of Pittsburgh, Pittsburgh, PA 15260, (412) 648-1774; Meryl K. Lazar, 5R24 Forbes Quadrangle, University of Pittsburgh, Pittsburgh, PA 15260, (412) 648-7210

Federal Amount of Grant: $22,000 Project #: 99-3009
ABSTRACT PAGE

Title: A Staff Development Model for Use of a Comprehensive Assessment System in Adult Literacy Programs

Project No.: 99-3009  Funding: $22,000

Project Director: Rita M. Bean  Phone No.: (412)648-1774

Agency Address: 5T23 Forbes Quadrangle  University of Pittsburgh  Pittsburgh, PA 15260

Description: The focus of this project was to provide staff development opportunities to adult education instructors so they could use the Adult Informal Measures developed at the University of Pittsburgh and procedures we had developed for their use in their own environments. The long range goal was to create staff development procedures for use of informal assessment in adult education programs by instructors with all levels of teaching expertise and involved in all types of instructional settings.

Objectives: (1) Create a staff development model for training adult education instructors to use informal assessment measures in conjunction with standardized test measures; (2) Implement the model at designated sites by working closely with designated professionals; (3) Document the implementation process; (4) Assess the effectiveness of the model; and (5) Prepare a report describing the staff development model, its effectiveness, and develop guidelines for use in training programs.

Target Audience Guidelines for integrating informal assessment procedures into adult literacy programs will be helpful to training personnel and to program directors looking for additional means of assessing program effectiveness.

Product(s): A detailed report describing the implementation of the staff development model at three sites and a set of guidelines for use in creating staff development opportunities for all adult literacy instructors.

Method(s) of Evaluation: Evaluation included documentation of site visits, recommendations, type(s) of follow-up on recommendations, use of assessment materials in classroom operation. Interviews of instructors and students at one site were conducted to develop an understanding of the process.

Findings: Learning to use informal assessment involves more than a knowledge base and assessment instruments. Instructors must understand what literacy learning is and is not before they can provide students with experiences which enable them to use their knowledge to construct meaning and assess their progress. Informal assessment can be integrated only when outcomes are clear to all.

Conclusions: Instructors first need to know the extent of their knowledge about the purposes of literacy learning, understand how their curriculum addresses this understanding and how they can use assessment and portfolio development to create informed instruction. Next, they need experiences with existing informal assessment instruments used within the context of meaningful literacy activities. Finally, instructors need the opportunity to create assessment measures to suit their own teaching situations.

Descriptors: (To be completed only by Advance Staff)
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Objectives</td>
<td>2</td>
</tr>
<tr>
<td>Project Overview</td>
<td>4</td>
</tr>
<tr>
<td>Program Descriptions</td>
<td>5</td>
</tr>
<tr>
<td>Staff Development Process</td>
<td>6</td>
</tr>
<tr>
<td>Conclusions</td>
<td>12</td>
</tr>
<tr>
<td>Guidelines for Creating Staff Development Sessions</td>
<td>14</td>
</tr>
</tbody>
</table>

Appendix A: Informal Measures for Solving Word Problems
A Staff Development Model for Use of a Comprehensive Assessment System in Adult Literacy Programs

Introduction

In general we are a society that tests and assesses regularly, particularly in educational environments. Instructional judgements are oftentimes based solely upon these assessments. In adult education programs, judgements are usually based upon a single pre- and post- standardized test score. This in and of itself is problematic because no single measure can completely assess the process and range of change resulting from participation in an adult literacy program. This type of testing may, however, be acceptable for satisfying accountability goals set by program funders and may be helpful in assessing longterm progress. A standardized test score is inadequate, however, for use in assessing ongoing student progress and for helping instructors make informed decisions about instruction.

One important reason that these standardized measures cannot reliably be used as a sole measure of progress or for providing information about instructional needs is that their content contradicts prevailing theoretical views of what constitutes progress in literacy learning. It is known that: (1) a student's prior knowledge is an important determinant of comprehension, (2) appropriate reading materials need to be of interest to the reader and have structural integrity, (3) inferential and critical reading are necessary for constructing meaning, (4) reading requires the integration of all communication skills, (5) skilled readers monitor their own comprehension using a variety of strategies depending upon purpose, (6) good feelings about literacy activities affect success, and (7) good readers read fluently (Glazer & Brown, 1993). Standardized instruments given in a single setting do not capture these dimensions of literacy. Instead of assessing reading as an interactive, constructive process they assess it more as a skill centered operation. Therefore, these test measures do not yield information about what readers can and
cannot do while reading material they encounter in their daily lives, because these tests are not able to provide distinctions among language, literacy, and culture (Wrigley & Guth, 1992). They, instead, reinforce the notion that literacy is an individual act that depends on individual skill attainment rather than literacy as a social practice that reflects the collaborative nature of life and learning (Fingeret, 1993).

Measures used to generate information regarding ongoing progress in literacy learning need to be sensitive to short-term change in student knowledge and provide meaningful feedback to students and instructors. These types of assessment measures, to be of true value, need to be a direct outgrowth of instructional goals, provide detailed feedback relative to these goals, and incorporate tasks which have instructional value within and of themselves. Although these types of tests are less reliable (using a statistical yardstick) than standardized tests, the accumulation of longitudinal information generated on each student provides a more accurate means by which to measure actual student growth (Shepard, 1989). These measures do not serve as accountability measures but as accurate reflections of ongoing student achievement relative to specified content and learning outcomes.

Objectives

Through prior research conducted at the University of Pittsburgh (Lazar & Bean, 1991), an informal assessment system was created consisting of performance based measures (Adult Informal Measures) in reading and writing which can be used in conjunction with standardized test measures. The AIM is comprised of writing assessment measures and reading assessment measures (narrative and expository), each containing three levels of assessment criteria. The criteria are additive and are designed to address increased levels of sophistication in reading
and writing as students progress through instruction. They can also be used interactively to address the reading/writing connection.

From this work, valuable information was accumulated regarding procedures for informing instructors about developing informal measures and using them in their own instructional settings. Inherent in these procedures is the need for helping instructors learn to create an environment of trust between them and their students so assessment can become a collaborative initiative.

It was obvious from this work that instructors need careful and systematic staff development training to develop an understanding of the purposes of informal assessment and to better understand the relationship between assessment and instruction. They also need long-term follow-up to reflect upon what they are doing, so they can become comfortable enough with informal assessment procedures to integrate them into their instructional repertoires. The focus of this project, therefore, was to provide staff development opportunities to adult education instructors so they could use the assessment instruments and procedures we had developed in their own environments. Overall, the long range goal was to create staff development procedures for use of informal assessment in adult education programs by instructors with all levels of teaching expertise and involved in all types of instructional settings.

Specific objectives were:

1. To create a staff development model for training adult education instructors to use informal assessment measures in conjunction with standardized test measures;
2. To implement the model at designated sites by working closely with designated professionals;
3. To document the implementation process;
4. To assess the effectiveness of the model; and
5. To prepare a report describing the staff development model, its effectiveness, and develop guidelines for use in training programs.

The report discusses the processes involved in working with instructors with differential levels of expertise to develop a theoretical understanding of informal assessment, to integrate informal assessment into their instructional repertoires, and to use the information from the measures to inform their instructional decision making. The discussion begins with the nature of instruction at the designated sites and the process which occurred at each site in working with instructors to integrate assessment strategies and procedures into their classroom routines. The report concludes with guidelines for creating staff development sessions for use of informal assessment in adult literacy programs.

Project Overview

Three programs participated in the project. The goal at each program site was to involve instructors from diverse instructional programs in the staff development process to get a clearer picture of the range of staff development needs. Therefore, at each site, intact classroom situations, volunteer tutoring situations, and more fluid small group situations were sought. Each instructional setting posed a different set of assessment needs, different instructional goals, different levels of student ability, and different types of instructor expertise.

<table>
<thead>
<tr>
<th>Program</th>
<th># Students</th>
<th>Worked With:</th>
<th>Program Focus/levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12-15</td>
<td>1 full-time instruc.</td>
<td>Prevocational</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3 volunteer tutors</td>
<td>Reading (ABE)</td>
</tr>
<tr>
<td>2</td>
<td>15-20</td>
<td>1 full-time instruc.</td>
<td>Reading (ABE/pre-GED/GED)</td>
</tr>
<tr>
<td>3</td>
<td>30-40</td>
<td>2 full-time instruc. 1 volunteer tutor</td>
<td>Parenting, reading, writing (ABE/pre-GED, GED)</td>
</tr>
</tbody>
</table>
Two of the programs were in the Pittsburgh area and were visited on a weekly basis for the first four months of the project. The other program was also visited on a regular basis, generally twice a month. As instructor expertise increased, we maintained contact through ongoing phone conversations. In addition, relevant materials were sent to expand the instructors' knowledge base about informal assessment.

The discussion which follows begins with a brief description of the organizations in which the programs operate, the type of program, the student population, expertise of the instructor(s), and the type of involvement with the project.

Program Descriptions

Program 1 is a large Pittsburgh-based literacy organization with diverse services offered at one main site, satellite sites throughout the region, and sites not under the auspices of the literacy organization (ie. workplaces). Work on the project was begun with several different instructors at the main site, but continued longterm with only one of them. Those who participated were: one volunteer tutor working one-on-one with a lower level reader, two volunteer tutors working with a small group of three lower level readers, and one paid instructor working with a class of 12-15 women sent by JTPA to augment their literacy skills prior to entering specialized vocational training. In both volunteer situations, student attendance remained consistent but volunteers were frequently away for extended periods of time, so there were many interruptions in the instructional process. In the classroom situation, students were paid to attend, and attendance remained consistent. Students attended five days per week for five hours/day. None of the volunteers had educational backgrounds, but the full-time instructor had extensive experience in adult education.
Program 2 is a literacy organization working under the auspices of a large nonprofit organization. Program offerings are diverse and are held not only at the organization's site but in sites throughout the community. One instructor from this program chose to learn to use informal assessment procedures. She teaches a class of SPOC students and teams with another instructor. The class size and composition fluctuate frequently as students leave and are replaced by new ones. Ability levels, goals, and motivation to learn also vary widely throughout the class. The instructor is well educated (not in the field of education) and possesses a strong ability to form a rapport and establish trust with and among the students.

Program 3 is 40 miles outside of Pittsburgh and focuses exclusively on family literacy. Two instructors are involved: one teaches the parents while the other teaches the children. The instructional foci for the adults are improving parenting skills and reading/writing skills. Large numbers of participants with a wide range of goals and abilities are attracted to the program. Parent goals are not always congruent with program goals which is oftentimes problematic. To accommodate everyone, class attendance is staggered and some of the adults attend only one day per week. Instructors are both former classroom teachers with no prior background in adult literacy.

The Staff Development Process

Site 1

Staff development began one-on-one with the full-time instructor who was teaching a class of 12-15 women who were all fairly capable readers and writers (6-8 grade reading level). They were enrolled in the course to further improve their reading and writing abilities to prepare for entry into technical training programs, so goals were clearly defined for both students and the instructor.

The instructor in this program viewed literacy instruction as an integral part of the social and cultural practices in these women's lives and as a forum for critical
reflection (Lytle & Wolfe, 1989). In addition to having a clearly defined view of literacy learning, this instructor had a love of writing and a well integrated understanding of the reading/writing process. Therefore, she focused her course on integrating reading and writing activities with the goal of encouraging critical thinking through reading, discussion, and writing. The theoretical underpinnings of the writing measures from the AIM (Adult Informal Measures) were consistent with the instructional philosophy around which this course was built, so they were an ideal form of informal assessment for this program. We began by establishing a schedule of weekly reading and writing activities, and after the first week students began to use the Level 1 self-assessment measure of the AIM writing scales.

The Weekly Schedule. Each week began with students reading a topical short story with a theme of significance to them. Discussion of the reading selection, of its theme(s) and its significance in their personal lives served as the prewriting activity. A writing prompt was then given, and the women were given class time to write. To assess progress and to enable the students to begin to develop criteria for progress, the instructor began using the Level I writing measure from the Adult Informal Measures after the first week.

Each week, the project coordinator met with the instructor to read written work created by students, to look at the use of the informal measures, and to discuss areas needing explicit instructional intervention as identified by the measures and by student writing. The goal of the weekly meetings was to help the instructor learn to use the feedback from the informal assessment measures to make ongoing instructional decisions. One example of this occurred in the beginning of the project. Students generally indicated in their self-assessment that they had not been able to say everything they had wanted to say about the topic, that they had gotten "stuck." Using this information, we planned strategies for helping the students become "unstuck." Together, the project coordinator and the instructor went
through each piece of writing for the week and formulated questions for the writers to address. These questions were intended as a means of providing a springboard for the writer to rethink what was written and to give direction for adding information helpful to the "audience" if it is other than the writer herself. This information was conveyed to the students in individual student conferences, after which, the student rewrote and reassessed their papers.

Once students were comfortable with rewriting and self-assessment procedures, the instructor indicated that it was time to move them to Level II of the instruments. She felt students were ready to increase the number of criteria for evaluation. She also felt they were ready to add peer evaluation, an integral part of Level II. Peer evaluation requires a high level of trust between students and the instructor and among the students themselves. This particular group thrived on the collaborative nature of peer evaluation and, over time, multiple rewriting became the norm. It was obvious that the students were learning about language, about literacy, about their belief structures, and solidifying their goals through the writing/assessment process.

At this point, the amount of information derived from assessment also increased. For example, when the instructor and project coordinator were reviewing weekly essays, we noticed that students were generally using short, choppy sentences. If longer more interesting sentences were used, they were generally run-on in nature. Using this information, we decided that skill instruction in sentence construction was warranted. Using sentences taken directly from student writing, exercises in sentence combining were developed and used for whole group instruction. Students were then asked to apply what they had learned by choosing a piece of their writing to rewrite with the goal of improving sentence structure. Spelling, punctuation, and capitalization were addressed in a similar manner, and driven by feedback from assessment. Through this experience, the
importance of skill instruction became clearer, especially, the value of explicit instruction in skill areas generated from a meaningful context.

As the year progressed, ongoing use of informal assessment measures became an integral part of classroom routines. The instructor served as facilitator and the students assumed more and more responsibility for directing instruction. During the final weeks of the course, students were creating their own writing prompts and using the instructor for feedback and for help with specific areas of need that they identified themselves. Scores on post standardized tests supported the positive effects of the use of ongoing assessment and of the stakeholder based nature of the instruction the students received.

Volunteer Instructors. One volunteer working in a one-on-one tutoring situation expressed an interest in working on writing with her student. We met several times with the full-time instructor to help the volunteer tutor begin to understand the process which was successfully operating in the classroom situation. The tutor diligently tried to encourage her student to write and to use an assessment measure to gauge progress, but the process did not work as hoped. Two factors affected success: (1) the tutor traveled quite frequently throughout the year, so tutoring sessions were interspersed with long interruptions in instruction; and (2) the tutor's teaching philosophy reflected a skills orientation (Lytle & Wolfe, 1989) and, although she tried to focus on the content of what was written, she most often focused on grammar and punctuation which she, the tutor, most strongly believed were the keys to writing success. The student, in turn, could not understand the purpose of the writing tasks because they did not fit into the literacy needs in his daily life. Therefore, they were not authentic tasks to him and just reinforced his already negative attitude towards reading and writing.

In the small group situation in which two volunteers worked with three women, both tutors adhered to the skills based orientation of instruction and class
time consisted of a series of worksheets. One of the instructors then left for an extended vacation and never returned, leaving the second instructor with the group. The second instructor had established a good rapport and a high level of trust among the students. After discussing with us ways of linking instruction with her students' experiences and interests, she found reading material to which these women could relate and began to develop writing prompts. We used the same model established by the full-time instructor and were pleased with the progress the women were making. Two of the three women were lower level readers, but when given reading material that related to the social context of their lives, their ability to critically think about and write about the material was impressive. Just as things were beginning to progress, the instructor was given other work responsibilities at the literacy agency and had to cease work on the project. However, the potential for integrating assessment with instruction was observed in this situation.

Site 2

One full-time instructor at this site wanted to devote time to the project. Our work began by going over the Adult Informal Measures and discussing informal assessment in general. This instructor's teaching philosophy was a combination of literacy as skills and literacy as tasks (Lytle & Wolfe, 1989) in orientation, but because of constant fluctuations in student enrollment, the instructor's goals of improving reading, writing, and math skills were vague at best. Before assessment could be a focus, this instructor needed to reflect on the nature of literacy learning in general and to find ways to provide literacy learning experiences for the diverse student population. We began by identifying students with clearly defined goals, goals which were congruent with those the instructor had identified. After several weeks of observation, a small group of three students emerged who articulated clearly defined goals for improving their math, particularly learning how to do percentages. We took this opportunity to combine instruction with assessment by designing
assessment measures which linked directly with appropriate instructional materials. This instructor began to learn about authentic assessment by creating it to suit the instructional needs and the goals of the students. As a result, we collaboratively created instructional strategies and assessment instruments which integrated reading, math, and assessment into the learning process (see Appendix A). Student feedback was positive and student progress was obvious as documented by the instruments.

Through this experience it became obvious that this instructor learned by doing, and once she had experienced the process, possibilities began to emerge because she began thinking about literacy instruction in a different way. She began seeing other types of small group instructional possibilities within her student population and began to better accommodate the fluid nature of the class. As she would form a group, she would more effectively develop instructional goals, compile appropriate materials, and find ways to assess ongoing progress. Portfolios of student work became the norm and regular conferencing with students to discuss their work became an established part of weekly routines. As time progressed this instructor developed her own instruments and her own strategies for documenting change.

Site 3

The full-time adult literacy instructor at this site focused her teaching primarily on parenting skills and based her instruction upon a text which was quite complex. Reading instruction was self-taught using the PALS computer software, and was skill-based in nature. This instructor viewed literacy learning as a series of skills that once mastered would change people's lives. The group was large and oftentimes unwieldy, to some extent, because they were vocal about what they wanted to learn to improve their lives. These needs, however, did not fit into the instructor's instructional agenda and neither did the notion of using assessment to
communicate and accommodate instruction. Informal assessment was not integrated into this situation until the class was broken into smaller groups. One small group was formed which was taught by a tutor who viewed literacy as a language process. He focused instruction on reading and writing and slowly integrated the writing assessment instruments from the AIM into his instructional program. Because this group was comprised of lower level readers, it was soon discovered that just getting students to write was not enough. They also needed basic skill work on sentences, so they had the language tools with which to write more coherently. Once this instruction was in place, the idea of sequencing ideas was worked on. New assessment instruments, therefore, had to be developed to accommodate the different needs these students exhibited. It became obvious that student need had to drive the type of assessment used and that the assessment informed students and the instructor as to instructional needs.

Conclusions

From this work it became obvious that learning to use informal assessment involves more than providing a theoretical knowledge base and a set of assessment instruments. Several criteria must be met prior to thinking about integrating informal assessment into the instructional process. First, instructors must understand that literacy learning may include skill learning and learning how to do literacy tasks such as reading menus, but the true purpose of literacy learning is for learners to use the skills to derive meaning from what is read so they can do the tasks. Second, instructors must understand the need to teach skills in the context of tasks and practices addressed in the context of meaningful cultural and social settings (Fingeret, 1993). Third, instructors must understand that using real reading and writing tasks enables students to experience literacy learning as they experience language in their daily lives.
Once these three criteria are met, students can use their own experiential and cultural knowledge to construct meaning and can begin to assess their own progress in literacy learning. It is at this point, when instructors and students have developed a mutual understanding of instructional goals that informal assessment can begin to be integrated into an instructional program, because outcomes are clear to all involved in the literacy learning process.

In providing staff development training on informal assessment, training personnel need to be equally as sensitive to the needs of instructors. They need to be aware that instructors need the time and opportunity to reflect upon their views of literacy learning, to discuss them with colleagues, and to be given additional knowledge which will provide them with a better understanding of literacy learning. Not unlike the adult students, instructors need to know the extent of their knowledge about the purposes of literacy learning, understand how their curriculum addresses this understanding and learn about how they can use assessment and portfolio development to create informed instruction.

Once individual views of literacy learning are clearly identified, instructors can then experience existing informal assessment instruments as used within the context of meaningful literacy activities. Finally, since the purpose of informal assessment is to provide activities which are an outgrowth of instruction and provide meaningful feedback to both students and instructors, the inservice process needs to encourage instructors to find their own ways to create informative measures to suit their own teaching situations. Developing and using informal measures is a generative process of deciding what behaviors the student and the instructor hope to see emerging as a direct result of instruction. Therefore, measures oftentimes need to be tailor-made to accomplish this.

Overall, informal assessment measures which are a direct outgrowth of instruction and are a clear outgrowth of student/teacher definitions of progress
create an informed learning environment for both teachers and students and collaboration between teachers and students in meeting learning goals. Both become stakeholders in measuring student progress.

Guidelines for Creating Staff Development Sessions on Using Informal Assessment

Learning to use informal assessment is a process which needs to occur in stages. Issues which need to be addressed include: (1) helping instructors learn to reflect upon and develop an understanding of why they approach literacy instruction as they do (their instructional philosophy); (2) what goals they are addressing through the instructional programs they design, and (3) how the instructional program they develop needs to address the relationship between their philosophy of literacy instruction and the goals they identify.

Phase 1 (Awareness): *Why I Approach Literacy Instruction as I Do?*

Staff development begins with helping instructors develop an awareness of how they define literacy learning and how to use these definitions to build programs that incorporate the theoretical elements of good literacy instruction. Lytle and Wolfe (1989) developed a useful framework of types of instructional practices. Staff development specialists can use these to begin instructor reflection regarding personal philosophies of literacy learning. The four practices they identified are as follows: (1) literacy learning as an accumulation of skill learning which students are automatically able to transfer to real life literacy tasks; (2) literacy learning as completion of a series of tasks (ie. reading bus schedules) which are automatically transferred into daily lives; (3) literacy learning as social and cultural practices which make it part of the community from which students come and helps them construct meaning; and (4) literacy learning as critical reflection which enables students to look critically at what they read.

Once instructors have begun to form understandings of the philosophy by which their programs are operating, staff development specialists can begin to help
them develop ways of integrating all four practices, so skills are incorporated into tasks which are an outgrowth of meaningful reading and writing experiences which adults encounter in their daily lives. Materials used are carefully chosen and meaningful to students, so they are able to use their experience to look critically at what they are reading and writing. Literacy learning then becomes a quest for understanding rather than skill acquisition. This enables instructors to stop and think about what they are teaching and to question the activities and materials they are using.

Once instructors have a clear understanding of how adults construct meaning and of the nature of literacy learning, they can then begin to directly address the nature of assessment and its link to instruction.

Phase 2 (Development): What do I want to teach and how do I want to assess progress in learning?

At this phase, instructors are becoming knowledgeable about the need to create literacy learning through instructional experiences which are meaningful to the adults they are teaching. To do this, it is important that instructors are able to clearly identify their own goals and allow students to voice their goals as well. Oftentimes student goals are vague in the beginning, but if the instructor's goals are clearly defined students can oftentimes use these to begin formulating their own. Goal setting is dynamic and as learning changes, both students and instructors need to reflect upon changing needs. Ongoing assessment enables students and their instructors to form an ongoing dialogue about progress. Through this dialogue, outcomes become clearer to both instructors and students. Staff development specialists, therefore, need to provide interactive experiences among instructors which enable them to discuss and clarify goals, to discuss student goals in relation to their own, and to reflect upon how well their instructional practices are addressing these goals. Throughout staff development training, teachers need to be given
opportunities to revisit these goals so they can rethink them as their knowledge and expertise increases.

Once goal setting becomes clear, this idea of linking goal attainment with assessment needs to be addressed and reflected upon. Sample assessment instruments such as those in the Adult Informal Measures can be introduced and discussed and interactive activities (simulations) developed, so instructors can "feel" assessment as it would occur in their instructional situations. Simulation activities can consist of actual reading/writing activities. Instructors can work in pairs or teams to complete the activities and use the assessment instruments to assess their own progress. Discussion can follow focusing on the process and what was learned from using the instruments. Instructors can then take the instruments back to their teaching situations, use them, think critically about their utility, and return to discuss this with the group. In this way they are learning about assessment in a meaningful context rather than as a theoretical construct which they do not understand how to apply in their own environments. Instructors are also interacting with their peers and helping one another to develop expertise in assessment as a group.

Phase 3 (Application): How do I use informal assessment in my own program?

Instructors have now had the opportunity to use informal measures which are already developed and have had a chance to critically think about their utility in their own teaching environments. The final phase in staff development would involve instructors in taking existing instruments and adapting them to specific program needs and/or creating additional instruments which better suit their own program needs. Instructors could be asked to pilot the instruments they have adapted and/or developed in their programs and provide feedback to the group on how they integrated them with instruction, what kind of information these instruments yielded, and how instructors planned to use the information in their
instructional programs. Discussion would create opportunities for collaboration in which instructors would work with one another to adapt assessment instruments, create others which better meet instructional goals, and discuss how to use the information obtained in instruction. This process helps organizations develop a unified instructional philosophy, instructional goals, and assessment program.

The three phases outlined create an environment in which all types of instructors can learn to reflect upon their own literacy learning philosophies, develop a knowledge base of good literacy practices, and integrate the two to formulate instructional goals. Once instructional goals are clear, they can use what they know about their students' goals to make instruction meaningful. Meaningful instruction creates a dynamic learning situation in which instructors and students both have a stake in defining outcomes. Integration of informal assessment into classroom routines helps measure progress towards defined outcomes and helps both students and instructors create instruction which addresses identified needs. All instructors (tutors and paid professionals) can reap the same benefits from use of ongoing, informal assessment. Good staff development teaches everyone to adapt and create instruments and to develop procedures which work in their own environments.
References


Solving Word Problems

Name ______________________________ 
Date ______________________________

On the worksheets, make up problems

I) To show how to find the percent of a given number.
   Example: 20% of 100

II) Using the formula for finding percents:

\[
\frac{\text{part}}{\text{whole}} = \frac{\%}{100}\%
\]

FIND:
   a) The percent when the whole and a part are given
   b) A part when the percent and whole are given.
   c) The whole when the percent and the part are given.

III) a) Changing fractions to decimals
     b) Changing decimals to fractions

IV) Involving a discount
    Example: A suit is on sale for $5 instead of $10.
    What percent is the reduction?

V) Finding an average
Solving Math Problems
Worksheet

For each problem complete the following five steps:

• **State** the problem
• **Identify** key words
• **List** steps for solving the problem
• **Work** the problem
• **Write** about how you solved the problem.

1) In your own words, state the problem (what are you trying to solve).
I want to find out

2) Read the problem and identify the key words or symbols (the words or symbols that tell you whether to add, subtract, multiply or divide). There may be more than one so be careful.

Key words or symbols are:

3) Write the steps you will use to solve the problem.
Step 1:
Step 2:
Step 3:
Step 4:
Step 5:
Step 6:
Step 7:
Step 8:

4) On the attached pieces of paper work the problem, showing all of your work. Follow the steps you listed above.

5) Write in words how you solved the problem so someone else could read it and do the same thing.

Developed by Lazar and Gerson, 1992
Self evaluation

You used the following five steps for solving the math problems:
- **State** the problem
- **Identify** key words
- **List** steps for solving the problem
- **Work** the problem
- **Write** about how you solved the problem.

Use the rating scale below to see how well you used the five steps.

Rating Scale: 2=Great 1=Okay 0=Oops, something's missing

<table>
<thead>
<tr>
<th>Problem #</th>
<th>State</th>
<th>Identify</th>
<th>List</th>
<th>Work</th>
<th>Write</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL**

**Total points**

Is there anything you will do differently next time you do word problems?

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

Developed by Lazar & Gerson, 1992
Solving Math Problems
Assessing Progress

Name ___________________________ Date ________________

Partner’s name ____________________

Peer evaluation

You used the following five steps for solving the math problems:
- **State** the problem
- **Identify** key words
- **List** steps for solving the problem
- **Work** the problem
- **Write** about how you solved the problem.

Use the rating scale below to see how well you used the five steps.

Rating Scale: 2=Great 1=Okay 0=Oops, something’s missing

<table>
<thead>
<tr>
<th>Problem #</th>
<th>State</th>
<th>Identify</th>
<th>List</th>
<th>Work</th>
<th>Write</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL**

**Total points** __________

Is there anything you think your partner could do differently next time he/she works on word problems?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Developed by Lazar & Gerson. 1992