The R3A3 Processing System for Experiential Learning in the Classroom

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In education today, much emphasis is placed on “experiential learning,” or learning by doing. An experiential approach to teaching allows students to participate in activities that provide concrete examples of concepts and skills being taught in class. Experiential activities seem especially appropriate in a communication class in which a focus is on developing communication competence, because becoming a better communicator involves active practice and evaluation.

However, experiential learning is not totally without problems. (For more information about problems associated with experiential learning activities and tips for increasing their effectiveness, see Eisenberg, 1980; Gray & Buerkel-Rothfuss, 1985). One area that can present problems is in the processing, or debriefing, of activities. Once an activity is completed, students sometimes need help in understanding and learning from what just happened. Instructors run the risk of being naive if they assume that the exercise alone will provide the students with enough information to be useful to them. Processing activities is, perhaps, the most important part of the experience. If done poorly, the activity may become a waste of time or, worse yet, a confusing or disconfirming experience that may be remembered forever.
TWO METHODS THAT CAN BE APPLIED 
TO THE PROCESSING OF ACTIVITIES 
OR EXERCISES

Even though most educators would agree with the above assessment of the importance of processing activities well, few instructors have had any specific training in how to process activities. Such a lack of training in “how to teach” in general seems to be widespread. Sorensen (1989) states that “new teachers go into the classroom and quickly realize that ‘teaching’ information will be an exercise in ‘trial and error’” (328). Further, she indicates that it is likely that “teachers model instructional strategies from their communication professors without knowing how or why it appears to work” (328). It seems reasonable to assume that the same may be true when it comes to processing activities. Through trial and error, many instructors find a procedure that seems to work for them, while others, even after years of teaching, have no planned procedure and view processing as a part of teaching that you “just do.” Learning processing skills in such a manner may be satisfactory for some instructors, but waiting for time to pass to learn from mistakes and/or hoping that some natural talent in this area will suffice somehow seems inadequate. Further, as role models for potential teachers, our own lack of systematic ways for processing activities may contribute to a detrimental use of experiential learning techniques.

While it is natural and desirable for an instructor to deviate from pre-established processing questions to respond to the needs of the situation at hand, overall guidelines for the effective processing of activities may be useful. For educators concerned about the quality of their own processing of activities, concerned with modeling a systematic approach to de-briefing experiential learning, and/or concerned for providing new instructors under their tutelage with an easy-to-learn
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A technique to provide a basis for a thorough processing of activities, a system for processing activities may be a useful tool. Talking with communication educators at conferences and conventions and perusing materials written for prospective teachers (see, for example, Cooper, 1988; McKeachie, 1986; Seiler, Schuelke, & Lieb-Brilhart, 1984) seem to indicate two major systems already in use to aid in the processing of experiential learning activities. These methods are Bloom's Taxonomy and the EDIT System. A detailed comparison of Bloom, EDIT and the system outlined in this paper (R3A3) can be found in Table 1. The following information will highlight major differences among the systems.

Table 1
Visual Comparison of the Components of Bloom's Taxonomy, EDIT, and R3A3

<table>
<thead>
<tr>
<th>Bloom</th>
<th>EDIT</th>
<th>R3A3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive Domain</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge (3/9)</td>
<td>Describe</td>
<td>Report</td>
</tr>
<tr>
<td>Comprehension (2)</td>
<td>Infer</td>
<td>React</td>
</tr>
<tr>
<td>Application</td>
<td>Transfer</td>
<td>Reflect</td>
</tr>
<tr>
<td>Analysis (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synthesis (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Affective Domain</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responding (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valuing (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characterization by Value or Value Complex (2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Psychomotor Domain
Gross Bodily Movements (2)
 Movements Involving Two or
   More Bodily Movements
Finely Coordinated Movements
   (5)
Non-Verbal Communication
   Behaviors (3)
Speech Behaviors (4)

Note: The information in column 1 is from Behavioral objectives and Instruction (pp. 44-75) by R.J. Kibler, L.L. Barker, and D.T. Miles, 1970 Boston: Allyn and Bacon, Inc. The first number next to each category represents the number of subcategories in the particular subcategory; the second number next to each category represents the number of sub-subcategories. The information in column 2 is from Processing games and simulations: The EDIT system (pp. 10-11) adapted by A. Covert, in R. Abelman (Ed.), Instructor's Manual to accompany Human communication: Principles, context, and skills, 1980, New York: St. Martin's Press.

Since the 1950s, the taxonomy of behaviors developed by Bloom's committee has been used to guide instructors in developing educational objectives for enhanced learning outcomes. Certainly most, if not all, students in education courses have studied this body of work for its usefulness in understanding the complexity of learning (see Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956; Kibler, Barker, & Miles, 1970). However, translating this taxonomy into a system useful for the somewhat spontaneous needs of processing activities shows it to be too difficult to be of much use. For example, the cognitive domain, perhaps the most commonly-used of the three domains in the taxonomy, includes six levels: knowledge, comprehension, application, analysis,
synthesis and evaluation. A closer look at the most detailed of these levels, knowledge, shows three subcategories (knowledge of specifics, knowledge of ways and means of dealing with specifics, and knowledge of the universals and abstractions in a field). Further, a total of nine sub-subcategories can be found under these three subcategories (Kibler et al., 1970, pp. 47-51). Using this information to generate a system to use in processing activities would be cumbersome at best and would require many hours of study and practice in order to commit these ideas to memory for ready use. Add to that the fact that Bloom’s taxonomy includes two other major domains (affective and psychomotor), and it becomes possible to believe that this information has limited use in the actual processing of experiential learning activities.

First published in the 1970s, the second system, the EDIT System, was developed specifically for use in processing experiential activities (Covert, 1980). Unlike Bloom’s taxonomy, the only goal of this concise system is the thorough debriefing of activities. It does not attempt to help understand or explain human behavior, it is there to help instructors and students come to their own understandings and explanations by providing a systematic framework for this process. The system consists of four steps: Experience (E), Describe (D), Infer (I), and Transfer (T). This system is both easy to teach and use — on the surface. The major drawback found with this system is in its very simplicity. For an inexperienced teacher, the system does not provide anything other than broad guidelines from which to generate questions. Since the first step is simply to do the activity, there really are only three levels of questions that come to mind in the actual processing (Describe, Infer and Transfer). The EDIT author provides helpful lists of possible question areas within each category; however, the trigger words remain few and, therefore, possibly problematic. While the EDIT author cautions instructors to “plan almost as long for processing as the game/simulation takes to play” (11), it is easy for the new
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teacher to go through all three levels quickly and feel as though the processing was complete. Indeed, frequent observations of brief processing done by GTAs and methods students prompted the development of the system described in this article.

In addition to the above problem areas, three specific concerns have been noted through experience with the EDIT System. Recent discussions with graduate students who were taught the R3A3 System and were using it in their own classrooms reinforced the ideas presented in this paper. Further, using a hypothetical exercise about stereotyping, a colleague (who teaches the GTAs in her class the EDIT System) and this author (who teaches the GTAs/methods students in her classes the R3A3 System) generated sample questions using the two systems. We attempted to keep the questions simple, as we felt a beginning instructor would tend to do. This “exercise” further depicted the problem areas detailed below.

First, the Describe Category tends to leave out the affective domain. Too often inexperienced teachers ask students to tell what happened on a descriptive level without getting to their feelings about what happened. This seems to be an important consideration to explore early in the debriefing process since this may be the kind of disclosure that motivates the students to get involved in further analysis. For example, if a certain behavior (e.g., lack of direct eye contact) makes people uncomfortable enough to want to end the interaction, the motivation to want to learn how to alter the behavior may exist more clearly for the students. The system being proposed here seeks to avoid this problem with the inclusion of two categories which call for both descriptive input as well as the possible emotional responses associated with the behaviors shown (Report and React Categories).

The second concern is rooted in the tendency of inexperienced teachers to be focused blindly on the point they want to draw from the activity. At times, the point the instructor sees
as the primary outcome of the activity may not be the most important outcome for a given student. It seems clear that a series of focused questions (e.g., “What happened when you heard the correct solution?”) may not touch upon a pressing concern of any one student. The system proposed here seeks to alleviate this potential problem by providing the instructor with a place in the processing system to allow students to voice their concerns, questions, etc. The Reflect Category, then, seeks to address this potential problem area by creating a time for student input of a less focused nature.

The third concern lies in the breadth of the Infer Category. A critical component of “what does this mean” is to help students see the complexity of the variables/behaviors being studied. It may be all too easy to generate a question asking students to tie up the principle exhibited through the exercise and be done with it. The label “Infer” may not generate a reminder to the instructor to discover why the findings of the exercise may have occurred. Further, it often is important to evaluate the conclusions drawn to make sure we are not generating simplistic truisms rather than helping students see the dynamic process-oriented discipline those of us in speech communication know the field to be. The system being proposed here seeks to avoid this problem by starting with an Analyze Category to generate questions which guide students to draw conclusions about what they experienced in the activity and why these things occur. In addition, however, the proposed system includes an Assess Category which seeks evaluation of the possible conclusions drawn from an exercise.

For the reasons described above, then, the R3A3 System has taken the first category of the EDIT System (the Describe Category) and changed/divided it into the first two categories of R3A3: Report and React. The R3A3 then adds a third category: Reflect. As with the EDIT System, the proposed R3A3 System ends with an understanding of what was just seen/learned and an application of the ideas gleaned from the activity to situations taking place in the students’ lives. These
The last two categories of EDIT (Infer and Transfer) are somewhat analogous to the R3A3’s Analyze and Apply Categories; the R3A3 adds a category in between called Assess. Table 2 presents a comparison of the EDIT and the R3A3 Systems.

<table>
<thead>
<tr>
<th>EDIT</th>
<th>R3A3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exercise</strong></td>
<td>Do the game or simulation.</td>
</tr>
<tr>
<td><strong>Describe</strong></td>
<td>The generic question for this category is “What did you see, hear, think and feel?”</td>
</tr>
<tr>
<td><strong>React</strong></td>
<td>The generic question for this category is “How did you feel?”</td>
</tr>
<tr>
<td><strong>Infer</strong></td>
<td>The generic question for this category is “What general principles, theories or hypotheses might be developed about interactions, behaviors, or tendencies?”</td>
</tr>
</tbody>
</table>

Table 2
Comparison between EDIT and R3A3
**R3A3 Processing System for Experiential Learning**

<table>
<thead>
<tr>
<th>Assess</th>
<th>The generic question for this category is “Is this good or bad?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer</td>
<td>The generic question for this category is “So what? How might you use this concept in another situation or how does this information apply to what you do?”</td>
</tr>
<tr>
<td>Apply (Summary — what can be concluded)</td>
<td>The generic question for this category is “What can be concluded about this issue and how can it be used?”</td>
</tr>
</tbody>
</table>

It should be understood that this author is not negating the EDIT System as a useful tool in the processing of activities. Indeed, as anyone familiar with the EDIT System will notice, the system proposed in this paper owes great debt to the EDIT System (as well as Bloom’s Taxonomy) and the author encourages any educator interested in using the R3A3 System to read the materials written about Bloom’s Taxonomy and the EDIT System. However, a system more complete than EDIT yet less complex than Bloom may provide inexperienced teachers (and trainers of yet-to-be teachers) with a more effective alternative for processing experiential activities. The R3A3 Processing System was devised to fulfill this need.²
THE R3A3 SYSTEM FOR PROCESSING ACTIVITIES

The R3A3 Processing System consists of six categories that should provide a basis for a thorough examination of an activity. A description of the type of information sought in each category is provided, but instructors are encouraged to create their own questions to fit the specific activity being used. While very simple, open-ended questions (e.g., in the Report Category, ask “What happened?”) may be useful in some circumstances, more specific, activity-oriented questions (e.g., in the Report Category, ask “What roles did you see the people take on at the start of the exercise?”) may be more focused and so more useful and/or time efficient in other cases. Typically, all of the categories are dealt with during the processing of each activity and in the order listed, but exceptions to this can be found easily. A certain category may be inappropriate in a given situation (e.g., asking a group to react to how it felt when unable to complete a task because a group member forgot the instructions may be too sensitive an issue to deal with in front of the whole class). It may seem unnecessary to ask a question in a certain category at times (e.g., asking a group to evaluate their responses to the distortion that took place in a serial transmission exercise may seem overly obvious). For reasons like these, a category may be left out. Instructor questions that follow up on a student’s response may skip to a later category, class confusion may cause an instructor to return to an earlier category, a student’s response may not fit the category being explored, and so forth, causing the categories to be dealt with out of order and/or repeated. The R3A3 Processing System is not meant to be an inviolable one; it is meant to provide a framework within which each instructor can find ways to process exercises to meet his or her specific needs. The specificity of
the trigger word for each category, however, helps to stimulate a thorough processing of activities.

The R3A3 Processing System consists of the following six stages of processing questions: R1-Report, R2-React, R3-Reflect, A1-Analyze, A2-Assess, and A3-Apply. Each type of processing question is detailed in the sections that follow. The label for each category is meant to be a “trigger” word to help a beginning instructor recall the possible steps easily. Two of the categories seem to be an exception to this idea: Analyze and Apply seem to consist of two parts. While this is true, the “extra” idea in each is simply a summary and is included as a reminder to an instructor to decide if a summary of what has been said/agreed upon/concluded so far is needed in order for the next step to make sense.

Report (R1)

Ask the students to state what occurred. Students may recite their observations, the sequence of events that took place, the result of the activity, and so on. In this category, try to keep the responses informative and based on the actual experience: This is what I experienced or saw happen. The generic question for this category is “What happened?” Some sample questions might be “What happened when the exercise first began?,” “What changes took place in your behaviors as you moved closer together?,” or “How would you describe the process your group went through as it tried to solve the problem?”

React (R2)

Ask the students to state how they felt about what occurred. In this category students should be encouraged to
volunteer their emotional reaction to the experience (e.g., confused, frustrated, frightened, angry, hurt, a feeling of friendship, enlightened, a sense of accomplishment, motivated, etc.): This is how I felt about what happened. The generic question for this category is “How did you feel?” Some sample questions might be “How did you feel when you could not agree on a way to proceed?,” “How comfortable were you as you moved closer?,” or “How satisfied were you with the process your group employed to solve the problem?”

Reflect (R3)

Ask the students to state what else happened and/or might have happened. After reporting and reacting, allow time for other issues to be discussed: share details not reported before, compare and contrast the experiences shared by class members, discuss other possibilities of things that did not happen in class but that might have happened, share similar events experienced outside of class, ask class members to share the thoughts that might be going through their minds at this point, and so on. In this category, students are asked to delve into the activity in depth. The generic question for this category is “What else can be said?” Some sample questions might be “What were some areas that students experienced similarly and differently?,” “Do you think what happened to you is typical of other people/groups? Why or why not?,” “Has anyone ever seen this behavior exhibited outside of this exercise? Would you care to share this with the class?,” or “Is there anything else you would like to add at this point?”
Analyze (A1)

Ask the students to state why they think the events or feelings they just experienced and shared occurred. In this category, students should try to make connections and predictions: This occurred for these possible reasons (e.g., X caused Y to happen); my feelings were the result of X happening; if X had happened, then Y probably would have followed; and so on. Students are encouraged to discover norms of human behavior and possible reasons for these normative behaviors. The generic question for this category is “What and why?” Questions in this category may have to be finalized once the students’ answers to Report, React and Reflect have been given. Also, in some instances, the “why” may come before the “what” (e.g., “Why did you feel left out? What does this potentially tell us about the effect of the use of jargon?”); at other times, the “what” may come first (e.g., “What do your feelings tell us about the potential effect of inappropriate nonverbal gestures? Why does this conclusion seem to be true?”) The clarity of the progression of ideas would govern the decision here; based on the previous discussion, one choice or the other may make the concepts clearer to the students. Some sample questions might be “Why did you jump into solutions rather than set some criteria by which to judge a good solution?,” “Why did your behavior change as you moved closer together?,” “Why do you find many examples of this type of behavior in your friendships?,” “What can we say about the tendency for human behavior in this area?,” or “What can we say about this topic based on this exercise?”
Assess (A2)

Ask the students to state whether or not they think what happened is desirable or undesirable. In this category, students should be encouraged to make judgments as to whether or not they want to keep the feelings and skills that led to their behavior in the exercise or whether they should attempt to modify their behavior/attitudes. Assessments also might be made about whether or not one would be considered a competent communicator given the behaviors/attitudes exhibited. Assessments can be made about the behavior of others (either in the exercise or in examples shared from outside the classroom) as well. In addition to personal evaluation, it is important to try to visualize the judgments others will make about such behaviors (e.g., parents, friends, employers, etc.). This category allows teachers to discuss the many possible angles of a topic. It is easy to fall into the trap of coming up with simple conclusions to complex issues (e.g., labeling people is wrong). It is important for teachers to help students see broader implications. For example, labeling can be limiting and harmful, but some labels (e.g., jock) are inevitable and some are even useful (e.g., learning disabled identifies a problem that can be helped). So, rather than trying to eliminate labels, be wary of the problems with labeling. The generic question for this category is “Is this good or bad?” Some sample questions might be “Was your group’s behavior ineffective? Why or why not?,” “Was it wrong for you to become uncomfortable when you were seated very close to a stranger? Why or why not?,” or “Is it acceptable for friends to treat each other in this manner? Why or why not?” It is important in this category to come to some conclusions about the exercise. A final question well may be “So what are we saying about this behavior/attitude?”
Apply (A3)

Ask the students to state what all of this means to them. In this category, students should discover how they can use this information or awareness to improve their communication skills, relationships, and so on. The first step in this category is to come to some conclusions about the exercise even if they must be tentative or qualified. Some conclusions may have been drawn from the Analyze Step, but it is very possible that the Assess Step had an effect on the conclusions being drawn from the experience. Therefore, it is a good idea to state the final ideas that you hope the students have learned from the activity before going further. Students then should be encouraged to translate what they have experienced in the classroom exercise to events outside of the classroom. Students might react to an example given by the instructor or generate examples themselves. Although experience has shown this author that the conclusions often need to come before the application of the use of the conclusion, as with the Analyze Category, the order may be reversed. At times it may be clearer to ask “What can we generally conclude about this concept?” and then “How can we use this in our friendships?” at other times, asking “What can we do when a friend behaves with you in this way?” and then following it with “What can we say, then, about competent communication strategies in such situations?” may make the points to be learned easier to comprehend. The generic question for this category is “What can be concluded about this issue and how can it be used?” Some sample questions might be “What are we saying about this behavior/attitude?” “What does our discussion lead us to believe and in what contexts, under what circumstances and with what limitations?” “How can we proceed more effectively when we are first placed in a problem-solving group?” “How can we
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avoid the feeling of discomfort that comes from being too close to a stranger physically?,” “If you met someone in your social circle who behaved as did in the exercise, how might you respond in the future?,” “How can we use this information to enhance our own friendships?,” or “Can anyone think of an example from your life that would allow us to apply what we learned?”

CONCLUSION

The use of experiential activities can be an effective teaching tool for any instructor. Having a plan for processing the activities used can be a big step toward making this tool a useful one. Instructors may need to adapt their plans by sharing their reactions if people are reluctant to volunteer information, providing options for students to consider if they seem to have trouble formulating ideas or opinions, aiding the students in making connections among ideas and applying them to other experiences, and so on. In addition, each instructor will need to adapt questions to fit the unique characteristics of his or her classroom, students and personal teaching style as well as the goals and time allotted for an exercise. However, while acknowledging that no plan is perfect, we also should realize that to maximize the effectiveness of experiential learning, some plan is better than no plan. The R3A3 Processing System proposed here seeks to provide important trigger words to help an instructor consider the critical areas to explore when debriefing an activity.
REFERENCES


R3A3 Processing System for Experiential Learning


**AUTHOR NOTES**

A version of the R3A3 Processing System, written by the author of this paper, appears in the Instructor’s Manual to accompany *Communication: Competencies and contexts* by Nancy L. Buerkel-Rothfuss.

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**NOTES**


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