

DOCUMENT RESUME

ED 456 288

CE 082 268

AUTHOR Krogh, Lola
 TITLE Action Research as Action Learning as Action Research as Action Learning...at Multiple Levels in Adult Education.
 PUB DATE 2001-03-00
 NOTE 12p.; In: Research to Reality: Putting VET Research To Work. Proceedings of the Australian Vocational Education and Training Research Association (AVETRA) Conference (4th, Adelaide, Australia, March 28-30, 2001); see CE 082 232.
 AVAILABLE FROM For full text:
<http://www.avetra.org.au/PAPERS%202001/krogh.pdf>.
 PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Action Research; Active Learning; Classroom Techniques; Developed Nations; Educational Improvement; Educational Practices; *Evaluation Methods; *Experiential Learning; Feedback; Foreign Countries; Higher Education; *Learning Processes; Models; Operations Research; Participatory Research; Research Utilization; *Teaching Methods; Technical Education; Vocational Education; Vocational Education Teachers
 IDENTIFIERS *Australia; Reflective Practice; Work Based Learning

ABSTRACT

Research in Australia on evaluating the application of action research as an action learning tool and its impact on the learning of students, educators, industry, and training providers, explored how that learning, in turn, has impacts on research, learners, educators, and the community. In the field of social and community services, in particular, students completing Workbased Action Research Learning Projects become participatory action researchers as practitioners and, as interventionists, are seeking to help improve client systems. The concept of "learning by doing," in which learning is perceived as experiential, reflective, and reflexive, is fundamental to this approach. Learning partnerships between students and teachers and between and among students and workplace, and students, teachers, and industry, have become necessary and expected, permitting participation and ownership for the participants and employers. Action research learning projects were evaluated through a mixture of "process" and "outcome" evaluation, and roles of the respondents varied. All respondents valued using action research as an action learning experience and suggested that vocational technical education practitioners should definitely do it. The evaluation indicates that an "action research as action learning" educational model is an effective inclusive model of education management that promotes a chain reaction in which learning takes place at multiple levels. (Contains 30 references.) (KC)

K. Wittingham

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

Action research as action learning as action research as action learning ... at multiple levels in adult education

Lola Krogh

Canberra Institute of Technology, Australian Capital Territory

The Department of Community Development, its staff and students have become a network of people involved in using action research as action learning to generate experiential, collaborative learning. We are using action research and action learning processes widely. The processes are used and shared by individuals and groups within our courses to create local and personal change and to promote a more equitable, productive and sustainable learning community.

One key intention is to encourage development that crosses the boundaries of traditional disciplines and recognises the common elements of action learning and action research.

Students and staff involved in action research projects as action learning are supported through the provision of opportunities to access information, enhance skills and engage in experiential, collaborative and reflective learning and personal development processes.

In researching and evaluating the application of action research as an action learning tool, and its exponential impact on the learning of students, educators, industry and training providers, the researcher has explored how that learning, in turn, impacts on research, learners and educators and the community. It has proven to be an evolutionary process.

Theoretical background

Freire, in the late 1960s, Mezirow, in the early 1980s - and others - have stressed that the heart of all learning lies in the way we process experience, in particular our critical reflection of experience. They spoke of learning as a cycle that begins with experience, continues with reflection and later leads to action, which itself becomes a concrete experience for reflection.

Both action research and action learning may be compared to experiential learning. As usually described, it is a process for drawing learning from experience. The experience can be something that is taking place, or more often is set up for the occasion by a trainer or facilitator. Clearly, both action research and action learning are about learning from experience. The experience is usually drawn from some task assumed by a person or team.

'Experiential' learning is not just 'fieldwork' or 'praxis' (the connecting of learning to real life situations); although it is the basis for these approaches to learning, it is a theory that defines the cognitive processes of learning (Kelly 1997).

Action Research as Action Learning in adult education provides a theoretical methodological framework for the practice of learning, teaching and professional

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 456 288

CE 082 268
ERIC
Full Text Provided by ERIC

development. The model of teaching and learning we have developed is located in the alternative, non-positivist paradigm - based on theories of learning and knowing, such as Revans' *Action Learning*; Lewin's *Action Research*; and Kolb's *Experiential Learning*.

We would agree with Bob Dick when he states that

...When one considers the terms Action Research, Action Learning and Experiential Learning it can be determined that all are cyclic; all involve action and reflection on that action; all have learning as one of their goals. When considering action research and action learning it can be seen that in each: - action informs reflection and is informed by it. The reflection produces the learning (in action learning) or research (in action research)... (Dick 1997)

The process we have developed, with its emphasis on the learning through reflection on experience, involves the learner-practitioner in going through a sequence of actions indistinguishable from those of the action research spiral.

Historical background to the project

This series of projects had their origins in the staff room of the Department of Community Development in 1996. The original project, which is discussed in 'Following the 'Yellow Brick Road': initiatives in competency-based assessment in welfare', expanded from a brief discussion to a pilot program conducted in 1997 and has in turn extended through 1998/2000 to become an integral part of the assessment processes and delivery structure of the Department of Community Development. The focus began with a search for a valid assessment process that would provide grading options for our Diploma students and emerged as an expedition of discovery into and the endorsement of an effective alternative course delivery system. The change from a norm-referenced, curriculum-based program to a competency-based, criteria-referenced program provided the momentum for this initial project.

This revolutionary change in attitudes and approaches signalled the shift towards greater involvement of students in their own learning within their own resources, and an expectation of an investment of themselves in their own learning. I contend that best practice embraces these principles. Teacher and student have a shared responsibility in the education processes.

These projects have been discussed and analysed in previous papers by the writer and are available online at <http://lola.krogh.com/>. They include:

- Lola Krogh - *Lifelong learning in the new millennium: a shared responsibility approach*, presented at the AVETRA conference, Canberra 2000;
- Lola Krogh - *Weaving a seamless fabric: using flexibility, innovative pathways, technology and a cluster of industry and academic partnerships to skill the Social and Community Services Industry*, presented at the IVETA 'Skilling a Small Planet' Conference, Sydney 1999;

- Berwyn Clayton and Lola Krogh - *Flexible training strategies for social and community services: a case study*, presented at the NCVET Conference, Sydney, 1999;
- Satch Campbell, Lola Krogh and Terry Smith - *Moving learning from the classroom to the community*, presented at the Learning Communities Conference, Tasmania, 1998; and
- Lola Krogh - *Following the 'Yellow-Brick Road': initiatives in competency-based assessment in welfare*, Occasional Paper # 21, CIT Institute Assessment Project, 1998.

The wide range of Workbased Learning Projects completed by students in the Community Services field over the past three years has been evaluated through student and teacher learning experiences and draws from reflective practice. During the three-year research period, continual reflection has been done to analyse the spiralling chain of *action research as action learning* that it evaluates. It draws on insights from researchers, adult learners, teachers and community agencies and community members that have been active participants in the processes.

The approach

In the field of Social and Community Services, workers are interventionists. It follows that students in that field completing Workbased Action Research Learning Projects become participatory action researchers as practitioners and, as interventionists, are seeking to help improve client systems. Our department contends that lasting improvement requires that the participatory action researcher help clients to change themselves, so that their interactions will create the necessary conditions for inquiry and learning. The goals that are set for the projects include those of contributing to the practical improvement of problem situations and to developing public knowledge. The process of participatory action research aims to develop the self-help competencies of people, communities, and/or agencies facing issues.

'... Action research has been used before in many areas where an understanding of complex social situations has been sought in order to improve the quality of life. Among these are industrial, health and community work settings. Kurt Lewin, often cited as the originator of action research...' (McKernan 1991), used the methodology in his work with people affected by post-war social problems. This methodology promotes empowerment. We define empowerment as the process by which people learn, through active participation in the relationships, events and institutions that affect their lives, to develop and apply their capacity to transform themselves and the world in which they live. The community-based projects being completed in the Department of Community Development are most effective in achieving this outcome for the community of Canberra and its environs.

The concept of 'learning by doing', in which learning is perceived as experiential, reflective and reflexive, is fundamental to this approach. It recognises that people learn through the active adaptation of their existing knowledge in response to their experiences with other people and their environment. Moreover, the process of building on experience is a natural one for most people and action research provides a framework for formalising and making this process more effective.

The teaching strategy we decided upon uses experiential and constructivist learning principles (Boud et al 1985; Duffy and Jonassen 1992; Kolb 1984). Students are engaged in participative, problem-solving, community-based projects where those doing the research and those doing the learning are one and the same.

Students' projects are an individual or group-based collaborative supported by: the use of communication technologies such as electronic mail, asynchronous discussion forums and synchronous chat; print-based study guides; workplace mentors; IT access; tutorials and workshops. A range of individually based, workplace-relevant learning activities complements this. Students are provided with a range of online information resources, and have access to tutor support either individually or in groups as requested. Access is provided via telephone, electronic mail and face-to-face meetings as necessary, and can either be on-campus or in the workplace.

Learning partnerships

In *Individual lifelong learning accounts: towards a learning revolution*, Smith and Spurling argue that the existing fragmented, provider-led arrangements for education and training must be replaced by a responsive, learner-led system; and that a culture of lifelong learning must be developed throughout the population.

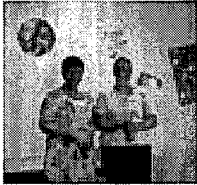
This view places the onus on learning communities, academic institutions and adult educators to create learning opportunities for adults; opportunities involving the key factors of best practice in education provision that incorporate innovative approaches that meet the learning needs of all adults. This needs to be achieved while grappling with the impacts of changing social relations in the economic, political, social, cultural and environmental areas of the world.

Such an innovative approach to learning was the beginning of a move towards a sharing of responsibility in the development of learning partnerships between student and teacher; student and workplace; and student, teacher and industry. The participants pictured at right are involved in a Learning Partnership with their workplace. They are part of a workplace team that are currently studying in the workplace and attending a weekly workshop to complete a work-specific Certificate IV in Child Protection, Statutory Supervision and Juvenile Justice. The induction course for this workplace was compiled with reference to approved National Competencies for this specific area. In turn, the National Competencies were mapped to existing curriculum-based modules to promote and maintain articulation. This study program was developed in liaison with the participants, the workplace management and our department, and involves assessment across competencies using action research projects as an assessment tool. These flexible strategies have allowed learners the opportunity to increasingly accept more responsibility and control over the development of their own learning. It also promotes participation and ownership for the participants and the employer. The purpose of this innovative approach is to encourage learners to invest more of themselves in their own learning and thus enhance the desired sense of shared responsibility.



Bob Dick states that

...current practice more often now is to set up an action learning program within one organisation. It is not unusual for a team to consist of people with a common task or problem ... (Dick 1997)



The participants pictured at left are involved in Workbased Action Research Learning Projects for their final assessment in the Diploma of Community Services - Welfare Studies.

Each of these students is involved in a different project in partnership with a community agency. In this action learning process, each participant draws different learning from a different experience that they share in tutorials or workshops. They are individuals involved in an action research team where they draw collective learning from a collective experience. Their action research may seek a different outcome but the learning, as they reflect on the process involved as a team, is a collective and similar experience.

Evaluation process

Essentially it is a mixture of 'process' and 'outcome' evaluation. As there were limited resources to conduct the evaluation, a methodology that comprises both 'process' and 'outcome' evaluation components was adopted.

The aim of the evaluation, as indicated by the title, is broad, covering a range of issues over a three-year period. It aims to identify the impact of action research as an action-learning tool in terms of the perspectives, thoughts and observations of those involved at multiple levels of adult education. It aims to evaluate if and how action research as an action learning process contributes to workplace learning for individuals and for the organisation.

The questions focused on the following areas:

- the role of the respondent with regard to the action research project
- a personal summary of the assessment projects they were involved in
- a summary of the outcomes, both expected and unexpected
- who was learning (based on personal observations and reflections)
- what was being learned
- the evidence that learning had occurred
- the value of the learning experience for organisations, self, other staff members, the students, the teachers and the VET training provider
- advice to other VET practitioners and/or organisations who may be contemplating using action research projects as action learning experiences.

The evaluation methodology comprised the following components:

- survey of the workers/students involved in the projects
- survey of the management involved in the workplaces before, during and after training delivery
- survey of the training facilitators
- survey of those involved in the Project Assessment Presentation panels

- qualitative interviews with the workers/ students involved in the action research learning projects
- qualitative interviews with the management involved in the workplace before, during and after training delivery
- qualitative interviews with the training facilitators
- qualitative interviews with the agency field supervisors.

All interviews were conducted on a basis of confidentiality, using a semi-structured interview schedule.

Roles of the respondents

The roles of the respondents were wide and varied. Some were involved with TAFE students and others were involved with training for teaching staff. The respondents stated that they were: middle managers with the RTO, such as Head of Department; facilitators for middle managers in staff development; managers of students completing projects for assessment; project supervisors with the training provider and the workplaces; tutorial and workshop facilitators; students; community agency managers; community members; and panel presentation assessors. Their major role was seen as introducing the concept and providing activities that encouraged critical reflection on their experiences, alongside support at all levels.

Summary of the assessment projects

In the case of teachers, projects were completed for their own departments/ workplaces. Students completed projects as their final assessment piece as final-year students, or as holistic assessment pieces over a range of modules being studied for workplace specific training.

Comments in this category included:

- 'As a teacher/facilitator I believe this process has opened up many avenues for effective assessment'
- 'I believe they have brought the gap between theory and practice together'
- 'They are an excellent learning tool which gives back to the agency or field useful products or research data'
- 'It is fantastic to see the concept of adult education transforming individuals - to see them moving from fear and reluctance into endorsement and commitment to study is remarkable'
- 'They are challenging and a worthwhile learning experience'
- 'They build self-confidence'
- 'I thought I could do it, but after doing this project I know I can'
- 'They are valuable to the community and provide new and innovative resources'
- 'They provide avenues for the completion of much needed research projects for our agency and are much more valuable than student placements'
- 'The action research projects allow the development of learning partnerships between teacher and student and encourage responsibility for learning'

The outcomes, both expected and unexpected

Planned and expected

In summary, the respondents indicated that reflection becomes part of practice, so the model develops reflective practitioners and improves current practices. This in turn leads to professional and personal growth where we are developing a more educated workforce delivering performance-related outcomes for the organisation. All respondents felt that there were measurable changes in staff performance and understanding of theoretical concepts and the incorporation of practice delivery outcomes. In general, students felt that completing an action research project pulled the whole course together, validated their learning and was an integrated experience of theory and practice - more experience and learning than they could get in a classroom. Each year, managers and field supervisors are surprised at how students always rise to the realities and the challenges that the projects place on them.

Unexpected

One of the biggest surprises when it comes to outcomes seems to be the high degree of personal growth. Many respondents were surprised at the value and power of the networking and support established within the group and in the organisation/industry.

The high standards sought and reached of the projects were mentioned several times. Student comments included the following:

- 'I learned more than I expected'
- 'I am surprised how far my confidence has grown'
- 'The whole process challenged me to confront my personal values and attitudes'
- 'I developed the ability to deal with government bodies, other agencies and social and community demands while remaining professional'

It was extremely interesting to find that those that sat on assessment panels indicated that values and attitudes become transparent through the assessment presentations. This indicated that the model could be capable of creating a shift, where traditionally non-assessable criteria become evident and assessable.

Workplace managers in particular were pleased to see the evolution and increase of worker perceptions of their own professionalism and the realisation that professionalism is not only the domain of other agencies. There was a high degree of recognition that staff morale had risen and that workers were more motivated towards organisational goals and further study.

The learning experience

Observations and reflections of who learned

Learning, it seems, has been very broad and goes beyond the participants. Participants, supervisors, peers, teachers, facilitators, mentors, management, agencies and communities have experienced learning. One respondent commented '... It allows a genuine learning culture to develop where teaching practice is informed by workplace reality, and it is a true theory building situation generated by

practice and everyone learns from their own experiences and the experiences of others'. One particular project that commenced in 1999 was followed through by the student after graduation in 2000, is still on a spiral of investigation and growth, and has now become a reality in the form of an emerging service funded by the community. The learning has spread from the participant and teachers within the academic unit to community members, politicians, community groups and service agencies.

Observations and reflections of what was being learned

Responses indicated that participants and peers learned about self through the process of deep self-reflection about theory to practice and practice to theory. Many felt it was important to note that participants learned confidence in self.

High on the list for teachers and facilitators was the learning of effective work practices, effective learning and teaching methods and effective theory building.

Facilitators learned how to better meet the learning and support needs of the participants and how to give one another feedback. They learned to accept that effective learning can take place in the workplace and is a better learning experience with support from a workplace supervisor.

Many respondents remarked that they had observed a new level of a cooperative sharing of ideas, and in particular it is extremely helpful to have sharing from past participants. It was apparent that the participating group needed to have commonality, but enough diversity to provide challenges

Field supervisors and assessment panel members learned new ways of looking at things and the value of reflective practice. The panel presentations demonstrated that individuals and teams are more highly motivated when they value themselves and their confidence is high.

Evidence that learning occurred

In some cases the learning was shared each week, while for others there was pre and post communication with students/trainees in the form of in-depth interviews. Learning was evidenced in the high quality of the projects produced and the increase in workplace skills and everyday functioning.

Value of the learning experience

The experience was more highly valued by the participants and their workplaces, on completion than at the beginning. Teachers found it valuable because much of the learning improved their practice. Managers valued the development of a more informed and professional workforce, whose members now see education and training as advantageous and so look forward to future learning in the higher education arena.

Many appreciated that the projects provided an integration of theory and practice and practice to theory and the fact that the process keeps teaching current and relevant.

Advice regarding using action research as an action learning experience

All respondents suggested that VET practitioners should definitely do it and critically reflect. We should push the paradigm. We need to recognise that we may never have enough empirical evidence to indicate that we should use action learning, but we need to take the chance.

Participants in this process should all be introduced to the concept of paradigms and paradigm shifting. Practitioners should follow this lead and give workers, managers and organisations the respect of knowing their job.

Workplaces appreciated the negotiation and liaison employed to establish the style of delivery and assessment.

Conclusions

The evaluation indicates that an action research as action learning educational model is an effective inclusive model of education management, which promotes a chain reaction where learning takes place at multiple levels.

As someone who has been involved in the process over the past five years, I suggest that to make this model successful, the practitioner needs the intuition to recognise the value of the concept, the courage to put it into practice and the commitment of time to make it work.

Another valuable asset is a 'Champion' in management; a manager that works as part of the team at the coalface, as a facilitator, supervisor and mentor - and yet will champion the ideas and innovations of the team to upper management.

The latest innovation

The championing of our innovations by the Head of Department has given us the funding for a pilot 'Workbased Learning Centre' within our department. From this centre we are currently delivering workplace training at certificate level, action research projects as assessment tasks and a workbased postgraduate diploma in partnership with the University of Western Sydney.

The future for action research as action learning

Action research as action learning in this department will continue. Partnerships are developing with students, industry, organisations and educational institutions. We believe that this approach leads to the development of lifelong learning as an element of a vibrant, innovative learning society. It lays the foundation for a fundamental change in attitudes towards training, teaching and learning on the part of individuals, groups, and organisations.

References

Argyris C and Schon D A (1987) Theory and practice: increasing professional effectiveness. San Francisco: Jossey Bass.

- Boud D, Keogh R and Walker D (1985) What is reflective learning. In D Boud et al (eds) Reflection! Turning experience into learning. New York: Kogan Page.
- Brennan J and Little B (1996) A review of work-based learning in higher education. Sheffield (DfEE).
- Brookfield S (1990) The skilful teacher: on technique, trust and responsiveness. San Francisco: Jossey Bass.
- Buckle J (1987) Handbook for the assessment of experiential learning. London: Learning for Experience Trust.
- Candy P C (1991) Self-direction for lifelong learning: a comprehensive guide to theory and practice. San Francisco: Jossey Bass.
- Carr W and Kemmis S (1986) Becoming critical: education, knowledge and action research. Basingstoke: Falmer Press.
- Dick B (1997) Action learning and action research.
<http://www.scu.edu.au/schools/gcm/ar/arp/actlearn.html>.
- Driscoll M (1999) Web-based training in the workplace. *Adult Learning*, vol 10, no 4, pp 21-25.
- Duckenfield M and Stirner P (1992) Learning through work. Sheffield: Employment Department.
- Duffy T M and Jonassen D J (eds) (1992) Constructivism and the technology of instruction: a conversation. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Entwhistle N J (1988) Styles of learning and teaching: an integrated outline of educational psychology. David Fulton: London.
- Field L and Ford G (1995) Managing organisational learning: from rhetoric to reality. Melbourne: Longman Cheshire.
- Freire P (1985) The politics of education: culture, power and liberation. Massachusetts: Bergin and Garvey Publishers Inc.
- Garrick J and Kirkpatrick D (1998) Workbased learning degrees: a new business venture, or a new critical business. *Higher Education Research and Development*, vol 17, no 2, pp 171-182.
- Kelly C (1997) David Kolb, the theory of experiential learning and ESL. *The Internet TESL Journal*, vol 3, no 9. <http://www.aitech.ac.jp/~iteslj/Kelly-Experiential>.
- Kemp I and Seagraves L (1994a). Structured learning in the workplace - the industry perspective. Glasgow: Glasgow Caledonian University.
- Kolb D (1984) Experiential learning. Experience as the source of learning and development. Englewood Cliffs, New Jersey: Prentice-Hall.

- McKernan J (1991) Curriculum action research. London: Kogan Page.
- Mezirow J (1990) Fostering critical reflection in adulthood: a guide to transformative and emancipatory learning. San Francisco: Jossey Bass.
- Osborne M J, Yule W, Dockrell R and Neal P (1993) Accreditation of in-house courses and accreditation of prior experiential learning - some case studies. Stirling: Stirling University and Glasgow Caledonian University.
- Ott J S (1989) The organizational culture perspective. Illinois: Dorsey.
- Parsons D, Cocks N and Rowe V (1998) The role of the employee development schemes in increasing learning at work. DfEE Research Report, no 73. Sudbury: DfEE.
- Reeve F, Gallagher J, Sharp N, Osborne M L, Whittaker R, Dockrell R and Neal P (1995) Developing employment-based access to learning (DEAL) - final report. Glasgow: Glasgow Caledonian University/University of Stirling/Napier University.
- Schon D (1983) The reflective practitioner: how professionals think in action. New York: Basic Books.
- Seagraves L, Kemp I and Osborne M J (1996a) Are academic outcomes of higher education provision relevant and deliverable in the workplace setting? Higher Education, vol 32, pp 157-176.
- Smith A (1999) The elements of a training culture. In Robinson C and Arthy K (eds) Lifelong learning. Developing a training culture. Adelaide: National Centre for Vocational Education Research, pp 73-80.
- Taylor S and Spencer L (1994) Individual commitment to learning - individuals' attitudes. Sheffield: Employment Department.
- Zuber-Skerritt O (1982) Action research in higher education. London: Kogan.
- Zuber-Skerritt O (1991) Professional development in higher education: a theoretical framework for action research. First World Congress On Action Learning, Action Research and Process Management. Brisbane: Aebis Publishing.

Contact details

Lola Krogh

Email: lola.krogh@cit.act.edu.au



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

| | |
|---|-------------------|
| Title: <i>Proceedings of the 4th Annual Conference 2001</i> (AVETRA) | |
| Author(s): | |
| Corporate Source: <i>AVETRA</i> | Publication Date: |

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

The sample sticker shown below will be affixed to all Level 2A documents

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 1

↑

Level 2A

↑

Level 2B

↑

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, →

| | |
|--|---|
| Signature: | Printed Name/Position/Title: <i>KAREN WHITTINGHAM SECRETARY/TREASURER</i> |
| Organization/Address: <i>Locked Bag 70 Alexandria New 1435</i> | Telephone: <i>703 242 3420</i> FAX: <i>02 92094054</i> |
| E-Mail Address: <i>kwhittingham@ericae.org</i> | Date: <i>13/2/01</i> |

