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ABSTRACT

This symposium on assessment and evaluation modeling consists of three presentations. "Training Assessment Among Kenyan Smallholder Entrepreneurs" (George G. Shibanda, Jemymah Ingado, Bernard Nassiuma) reports a study that assessed the extent to which the need for knowledge, information, and skills among small scale farmers can promote effective management of the off-farm enterprises. It recommends business counseling as an integral part of extension education. "Business-Focused Evaluation: A New Collaborative Model" (Valerie Stead) presents a case study of a business-focused evaluation model developed as part of an organizational development intervention for a global semi-conductor company. It assesses the model's value against three principles concerning collaboration, joint ownership, and integration drawn from client and provider needs and current thinking in evaluation research. "Challenges in Measuring and Evaluating Diversity Efforts in Human Resource Development" (T. Marshall Egan) examines challenges faced by practitioners and scholars interested in evaluation and measurement of diversity efforts in organizational contexts. It considers an organizational systems model illustrating the diversity-related interchanges between an organization and the macro environment and examines challenges to measurement and evaluation due to the latency of the diversity, performance, and performance improvement constructs. All three papers include substantial bibliographies. (YLB)

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Training Assessment Among Kenyan Smallholder Entrepreneurs

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The smallholder occupation includes on-farm and non-farm activities. The latter are by extension enterprises supplementing the small farm incomes due to population pressure and reduced productive farm holdings in Kenya, and are to raise smallholder farm earnings. One crucial factor is lack of rapid development for holders being less responsive to farm innovations, notably inadequacies in knowledge and skills. This work recommends that business counseling approach need be integral part of extension education for small farm enterprise management.

Keywords: Needs assessment, Entrepreneur, Management Skills

The term smallholder is interchangeably used with relative terms like small farmer and peasant in the African setting. Leonard (1977) in his research on reaching the peasant farmer describes small farmer and peasant as managers of their small individual holding of land for small scale agricultural production and off-farm services. One handicap he identifies is lack of rapid small farm development calling for relevant and timely dissemination of knowledge and instruction on small farm centered enterprises. According to Livingston (1981) non-farm activities simply supplement on-farm earnings. One major reason for the search for non-farm activities on the farm or away from the farm is in response to land shortage in areas of population pressure while in others it can as well be an indication of good income opportunities. Gundu (1985) study on agricultural information diffusion to smallholders in Kenya observed that the paid rural employment opportunities and rural entrepreneurial tasks off-farm are both male and female domain. As holders they combine both on-farm and off-farm activities. The varying educational level, off-farm enterprises and gender are indicators towards training identification and needs among smallholders Odeng (1989). Smallholder entrepreneurs have not been able to realize their full potential due to inadequate training in skills relevant to areas of off-farm occupation. Enterprenuers operate to support the smallholder farm incomes. Off-farm enterprises fail due to mismanagement and inappropriate knowledge and skills application. Farm enterprises have erratic operational tendencies just because small farmers need instant additional income. The success of off-farm enterprises is depended on having the required skills. These skills can be described simply as technical and managerial. It is therefore being argued here that the attainment of the right skills is achieved through proper training followed by the practice of the learnt skills. This research is aimed at identifying the training needs in order to improve human resource to meet the day today challenges of running and optimizing financially based off-farm activities. Calling for small farmer training presupposes provision of knowledge, information and allied skills to ensure proper management of off-farm enterprises.

Problem Statement

The hypothesis behind this work is that smallholders are potentially intelligent, interested in obtaining relevant knowledge, information and skills with keen desire to utilize them for their personal welfare and provide goods and services to themselves as a rural community. This study is therefore aimed at assessing the extend to which the need for knowledge, information and skills among small scale farmers can promote effective management of the off-farm enterprises. It is argued that the Kenyan smallholder entrepreneur ineffectiveness is due to inappropriate training packages, non identification of proper training needs and inadequacies in trainer capacities. It is apparent William (1980), Odeng (1989), ILO (1992) that training is a prerequisite for knowledge, information and skills transmission,

necessary for achieving better management of the off-farm activities among the smallholders. The major bottleneck is Obura (1993) compounded by mismanagement of enterprises as may be revealed through lack of the necessary knowledge, information and requisite skills in running off-farm enterprises. Smallholders need to cultivate positive attitude towards training and have their training requirements spelt out before any business management training is imparted.

Theoretical Framework

This study applied a qualitative research data collection approach constituting mainly responses drawn from smallholders. The target group studied comprised of entrepreneurs. The focus in on rural development through extension education as means of informing, advising and training the smallholder on farm and off-farm activities. While focusing on rural development that constitute over 85 percent of smallholder activities, Supe (1983) concurred that rural development is the result of many interacting forces where education is one of them. His description of educational needs for rural development appears in four groups given as:

- General or basic education designed for providing literacy and primary education.
- Family improvement education designed primarily to impart knowledge, skills and attitudes useful in improving the quality of family life.
- Community improvement education designed to strengthen local and national institutions and processes through instructions on matters such as local and national government, community projects, etc.
- Occupational education designed to develop particular knowledge and skills associated with various economic activities and useful in making a living.

Supe (1983) identifies extension education as a method of education for rural based households outside the regularly organized schools for bringing out social and cultural development. Extension in this context is simply described as means to extend, to spread or disseminate useful information and ideas to rural people outside the regular organized schools and classrooms whilst education is the production of desirable changes in human behavior. Extension education is seen therefore as a program for people based on their needs and problems. It is basically designed to meet these needs and solve problems. It is a teaching and learning process striving to induce the following changes:

- Changes in knowledge or things known.
- Changes in skills or things done.
- Changes in attitudes or things felt.

Daham and Bhatnagar (1985) in their work on education and communication for development observed training to mean to educate a person so as to be fitted, qualified, proficiently in doing some job. Training includes education which aims at bringing a desirable change in the behavior of the trainee. This change, they assert that requires a change in knowledge, skills, attitudes, values, beliefs and understandings so that the trainee becomes qualified and proficient in communicating and performing certain jobs. Training through extension involves not only educating the rural people in determining their problems and methods of solving them but also inspiring them toward positive action.

The sessional paper No. 2 of 1992 on small Enterprises and Jua kali Development in Kenya, provides a policy framework for promoting small scale and Jua kali enterprise development in Kenya. The major policy framework set out by this paper includes:

(i) Providing direct assistance for management and entrepreneurial training and skills upgrading for individual entrepreneurs.

(ii) Disseminating information on market and appropriate technology

Jones (1998) summarizes micro enterprises access to training in Zambia as follows: 26% have had access to technical training (4 out of 10 have received their training through apprenticeships). Only 17% of women entrepreneurs compared with 38% of men are technically trained. 9.2% have received some business training (12% for men 6% for women). The surveys in both Kenya and Zambia also found similar positive relationships between training and enterprise profitability. The relationship between education and access to credit and the size of the enterprise, conducted by Oketch and Kisundu (1995) study on the demand and supply of small enterprises finance in Kenya done for the British Overseas Development Agency, found that there is a positive correlation between

education of the owner and the size of the enterprise on the one hand and access to credit and non-financial services on the other. The Central Bank (1999), Yambo (1992), Williams (1980), ILO (1992) consider the constraint to smallholder entrepreneurs to be counseling of the entrepreneurs. Negative perceptions of the smallholder entrepreneurs on the basis of lack of tangible financial trace record, cases of illiteracy are thought to be the worst in credit management.

Research Questions

The research questions guiding this study are as follows:

- What is the distribution of holder enterprises on the basis of education levels?
- To what extend does educational levels show enterprise needs?
- What attitudes do smallholder need for enterprise operation?
- What knowledge and skill deficiency exist among smallholder entrepreneurs?
- What are the objectives of smallholder enterprises?
- What tasks do smallholders need to perform to actualize entrepreneurial goals?
- What is the right time for training?
- What training capacities exist for imparting knowledge and skills?

Methodology

The Study Area

The sample area selected for this study is Kakamega district. The district has very high smallholder population density and poverty in Kenya. Smallholder land ownership is between 0.1 to 11 acres on average household. Due to pressure of land and reduced land for cultivation, most people have opted for off-farm activities to supplement the on farm cultivation just to raise extra incomes to support the families. The district forms part of western province whose educational attainment of the small farm population not currently in full-time education indicates, Kenya Government (1981) 30.1% male and 39.6 % female had received no education. The 50 + years age group showed a no education picture of 37.4 % male and 46.6 % women.

Target Population

The target population for the study comprised of 439 smallholders registered as business operators at the district trade office. They form part of what Gundu (1986), Shibanda (1999) see as the rural majority but less informed and less educated requiring access to agricultural education, information, advice and assistance in order to improve their methods of production, marketing, service provision and management of off-farm enterprises. They are smallholders whose holdings do not exceeding eleven acres. The study assumes, Kenya Government (1981) definition of holder to mean a person or persons who have the control and ability to make decisions relevant to the agricultural activities on the holding. A holding means all the land and livestock used partly or completely for agricultural purposes where again a holder may in fact operate neither land nor livestock. The purpose of such holdings is to provide food purely for subsistence yet cash oriented activities are undertaken to supplement on farm earnings.

Data Collection, Instruments, and Procedures

The research techniques applied in aid of data collection include:

- List sampling by drawing samples in list sampling of the District Trade Development Office. This method allowed to select a random group of 439 people from trade office on details of registered business owners. The details given were mechanical since the names sampled were randomly picked up. The persons on the trade register had every equal chance of selection out of which 23 people responded. This constituted 5.2 % of the total population.
- Attitude scales showing how people feel towards certain activities.
- Knowledge and comprehension test to find out whether the person understand or can apply certain acquired knowledge in a given situation.
- Skill or performance rating used to determine the amount of skill attainment in doing certain activity.

The first stage of the study deals with the exploration of relevant data available from documents. Basically this constitute information contained in official government records available for scrutiny. Data gathered is basically from District trade development office. The following sets of documents are examined to provide relevant data; registered business files, business annual and monthly reports and entrepreneur course evaluation reports. The above documents generate information on educational background, average stock, number of employees, profit earned per month, business occupation, gender composition, business experience and monthly business sales.

The second phase of the study collected data through questionnaires and observation. The aim of this phase is to provide data based on respondents as well as to test data collected in phase one of the study. The formatted questionnaire instruments were administered to avail data from small farm entrepreneurs and the extension trainers and credit providing institutions. The small farm respondents generated information concerning the following; enterprise identification, business training provided, respondents personal details, management skills, business performance. The respondents from extension trainers / creditors generated the following information; trainer/credit provider, respondent details, training assessment in enterprise management, rating and trend in training needs.

Findings

Distribution of Enterprises on the Basis of Educational Level

Defined as follows: never gone to school / never attended formal school; lower primary / class 1 to 5; upper primary / class 6 to 8; secondary / form 1 to 6; post secondary / attended middle level college or university.

Based on data analysis on the distribution of enterprises on the basis of educational levels registered 1995 – 1999. During this period a total of 439 traders were registered. 48% of the small farm operators were of upper primary education being the highest category in trade registry. Followed by secondary level with 37%, post secondary 7%, lower primary 6% and zero educational level 2.5%. This shows a range of differing aptitude in knowledge application and understanding based on education factor.

Extent Educational Levels Reveal Business Training Needs

The educational background is assessed against the following business performance and growth indicators.

(a) *Distribution of Enterprises by Owners' Education and Monthly Turnover Ration.* Stock turn over ratio is defined as net sales over average inventory at selling price. Distribution of enterprises by small farms' education and monthly turnover ratio gives an idea on the stock management. From the data the highest number of respondents fall under stock turnover ratio class of 0.5 – 1. The highest frequency in percentage is noted in class 0.5 – 1 under secondary level of education. It is however noted that 61% of the respondents have a stock turnover of one or more times. This indicates that 39% of the respondents can not turn the stock once. This could be due to poor stock control, poor pricing or stiff competition. Slow stock turnover exposes stock to the risks of loss of stock and holding capital in stock. A high stock turnover could be due to very low stock level hence frequent purchases being made. This requires proper understanding of the smallholder operators.

(b) *Distribution of Enterprises by Education and Profit.* Data on distribution of stores on the basis of owners education and profitability shows that 50% of the no education respondents are in the profit class of 0 – 3000. The lower primary has a peak in the class 3000 – 6000 which is 47%. The upper primary has a peak in class 0-3000 with 25% of the respondents, while secondary has a peak in the class 15000 - 18000 with 25% of the respondents while post secondary has a peak in the class 15000 – 18000 with 33% of the respondents. The overall class is 3000 – 6000 with a peak of 22%. This points to the fact that with zero education the profitability from business are very low while at least with upper primary level the profitability improves substantially. The business profitability for zero and lower primary educational level is basically for survival and is within the minimum wage level. Educational level therefore has an influence over the profitability of the business.

(c) *Distribution of Enterprises on the Basis of Education*. Distribution of business occupations on the basis of education level shows that over 79% of the small farm operators run retail businesses. All the zero educational level operate retail businesses operators in upper primary, and secondary have a wider identification in business occupations as compared with lower primary and post secondary. This data implies that education level has an effect on the business occupation one operates. The level of education has an effect on the capacity to utilize or acquire technical skills.

Attitude in Entrepreneurship

From the data on the necessary behaviors which farm operators need to respect in enterprise management, the following is ranked according to the percentage of respondents; keep proper books of records (1) 100 %, consult trade officers (2) 95 %, concentrate on the business (3) 87 %, seeking for information (4) 77%, and direct funds to better projects (5) 63%. This shows that keeping proper records is most crucial behavior in respecting small farm business operations and shows that consultation with trade officer's call for counseling and advisory service the time the small farm operator requires it.

Knowledge and Skills Deficiencies

The deficiencies small farm operators face in running their enterprises efficiently. Under the survey 23 respondents were administered questionnaires. Information on deficiencies of small farm operators shows that credit management is the main problem area with 32%, costing and pricing 28%, recording all things 27%, stocktaking 22%, identifying business opportunities 20%, marketing of good 18%, profit and loss 22% and budgeting 13% while managing credit had 2% of the respondents. This shows that entrepreneurs require training in working capital management, costing and pricing, investment decisions marketing of goods, profit and loss, record keeping time management and business planning.

(a) *Analysis of the Stock Turnover Ratio* - being net sales over average inventory at selling price. The data shows 48% of the respondents having stock turnover ratio between 0-1 only 8% has a turnover of one 2.5 –3. This shows that stock management could be poor or the businesses are under capitalized. This calls for training in working capital management.

(b) *Analysis of Return on Capital Employed* - being the annual net profit times 100 over total capital employed. The data shows that over 72% of the respondents have a return on capital employed ranging between 0 – 150% while 28% of the respondents have a return on capital employed ranging between 150% - 300%. It shows that the capital employed is dependent on the size of the business. This also affects the return on capital employed.

(c) *Analysis of the Cross Profit Ratio* - being gross profit times 100 over net sales. This shows that 75% of the respondents have a cross profit ratio of between 20 – 40% while 25% have a cross profit ratio of 0 – 20%. It shows that business involved in provision of goods and services give higher cross profit ratios than those involved in retailing.

(d) *Business Occupation in relation to Sex of the Operator.* The data analysis show that 70 % of the respondents were males while 30% were females. 84% of the males are in retail business as compared to 16% of females. Females have 64% in service related business as compared with 35% of males. It shows that females favor business occupations that add value to services and production as compared to males who prefer retail trade, general repair.

Objective of Small Farm Off-farm Enterprises

From the data on the objectives of small farm operators the ranking is as follows: To create employment for self and others is 93.3% of the total 60 respondents. This is followed by to provide goods/services to consumers with 88.3%, to earn profit / income is 83.3 and to get food is 65% pointing to the survivalist nature of the entrepreneurs. This shows that small farm operators basically set their business to create self employment, earn income and to provide goods and services to consumers.

Small Farm Tasks

Tasks that small farmer need to perform to achieve the goals of starting the business. Data on the tasks that the entrepreneur should complete to achieve the goals of starting a business through ranking shows that honesty is 1st with 96.7 % followed by keeping accounting records with 93.3 % and employ qualified people with 86.7 %, open early close late with 85 %, recognize opportunities 78.7; be persistent with 66.7 % and be master of business 58.3 % and market goods with 55 %. This shows that honesty, keeping accounting records, employing qualified people, opening at appropriate times, and recognizing business opportunities is important for the realization of the goals of starting a business.

Training Timing

What is the right time for training? Information on the timings for training points at training being provided at least after every 6 months, followed by credit procurement and lastly before starting business. Training after starting business is not ranked high by the respondents. The respondents do not consider the training after starting business to be very important, William (1980), KIE, K-REP, KIM (1991), Nelson (1991) and Yambo (1992) look at counseling as an option. The data also shows that traders do not require regular training this could be because it distracts them from running their business. The interpretation of timing shows that training should be well timed with consideration of the right time for training, in order to optimize on the business returns.

Capacities for Training

Assessment of the existing capacities for training to support small farm enterprises was conducted. A questionnaire administered to extension training / credit providers gives some insights on the existing capacities, rating and training packages for the small farm entrepreneurs.

(a) *Capacities*. The existing capacities of trainers reveal they hold either of the following qualifications; B.A (Econs), Diploma in Business Management and CPA II, Bachelor of Business Administration, Doctorate (Ph.D.) Enterpreneurship, Banking, Master of Business Administration, Bachelor of Arts (Economics) and Kenya Certificate of Secondary Education.

(b) *Training Package for Small Farm Operators*. All the training organizations administered with questionnaire had training package for small farm entrepreneurs.

(c) *Types of Training Offered*. Types and rating; business management 6, technical Skills 0, entrepreneurial Skills 1, motivational skills 1, policy procedure and credit management 1.

(d) *Adequacy of Training*. Out of the seven respondents, five confirmed adequacy of the training they provide. Four stated that the training is not adequate. However all the seven proposed addition of counseling to training. Five out of seven stated that the impact of the training was good while four stated it was very good.

(e) Rating of impact of training on enterprise management: Unknown 0, Not useful 0, Useful 6. Only six out of the seven organizations gave the rating.

(f) Specific behaviors of training on trainees in enterprise management. Positive 7, Negative 0, None 0. All the seven considered their training to have a positive specific behavior on the creditors in small farm enterprise management.

(g) *Most suitable training package for entrepreneurs*: (a) Business Management skills; book keeping, working capital management, profit & loss, business planning, investment in Business opportunities, networking and business linkage, basic contract law, costing and pricing, marketing and customer relations, business premises tribunal, weights and measures and business counseling. (b) Technical Skills; one respondent inducted that the small farm operators should be trained on technical skills.

(h) *Rating and trend in training needs 1995-1999*. The rating by the 6 organizations which responded indicated that there is an increasingly trend in provision and demand for training.

(i) *Organizational Performance*. The analysis of the organizational performance shows the organizations have not reached an optimum level in the provision of training to small farm enterprise operators management. The training / credit providers understand the small farm training needs and that the trainers have adequate qualifications, experience and are mature people. The training organizations have training package mostly in business management. However, 71% of the respondents consider the training they offer inadequate. They rate the training to be useful and have positive impact. The trainers have recommended a training package in business management. Despite the fact that the training organizational performance has not reached the optimum there is an increasing trend for training. This therefore requires proper identification of training needs so that the training is matched with the needs of the recipient.

Recommendation and Conclusion

This study recommends the need for business counseling as an integral part of extension education in small farm enterprise management. It reveals the importance of skills in business management and from business performance analysis given the views of the small farm operators and the extension training / credit providers. The following training areas have been identified, working capital management, identification of business opportunities and investment, book keeping and accountancy, business planning, marketing, human resource management, business networking and linkages. This can be evidenced through; giving professional advice to a client with a problem,

facilitating of success, sharing of knowledge, helping people explore problems so that they can decide what to do about them, helps reinforce the benefit of the training through guidance on practical applications, the small holder operator can make suitable and sustainable business decisions. The identified business management skills deficiency calls for training at least after every six months. The educational level plays an important role in both the success of a business as well as the efficient use of the training provided. The operators with no education and lower primary are likely not to benefit from such training because they lack the necessary capacity and orientation essential for business growth. Their businesses are for survival. This category generates low profit and has a low stock turnover. While those with upper primary level and above showing receptive to training with profitable enterprise.

Contribution to New Knowledge in HRD

The study helps to isolate issues that prevent holders from utilizing their potential and achieving entrepreneurial objectives. It identifies business counseling as a training approach to apply as part of extension education for appropriate smallholder knowledge and skill provision in enterprise management. Core to this study is the extend to which the need for knowledge, information and skills among smallholders can promote effective management of off-farm enterprises. Spelt out are the knowledge and skill requirements, the tasks needed for enterprise performance, timing of training for the entrepreneurs and the status of the trainers. There is need for training that matches trainers and trainees. Applying otherwise wholesome training packages without taking into account the trainee needs may not be effective to the recipient smallholder. Smallholders may thus operate above their potential and capacities for self reliance, improvement in their skills, power of intelligence and development of desired attitudes and values required for business performance.

References

Central Bank of Kenya (1999). Kenyan economy growth report. Nairobi: CBK. April.

Dahama, O.P., & Bhatnagar, O.P. (1985). Education and communication for development (2nd. ed.). New Delhi:Oxford & IBH Publishing Co.

Gundu, G. S. (1986). Agricultural information diffusion to smallholders in Kenya. Loughborough University, Unpublished Master's Degree Dissertation.

I.L.O. (1992). An introduction course in teaching and training methods management development. Sterling Publishers PVT limited, New Delhi.

Jones, M. (1998). Introduction to micro enterprise support program. MESP seminars paper.

Kenya Government (1994). Kakamega District Trade Development Offices 1994 - 1998 reports.

Kenya Government (1992). Sessional paper No. 2 of 1992 on Small enterprises and Jua Kali Development in Kenya. Nairobi: Government Printers.

Kenya Government (1998). Ministry of Planning and National Development 1998 Economic Survey. Nairobi: Central Bureau of Statistics.

KIE, K-REP, KIM, & MTTT (1991). Training needs assessment of the informal sector. Nairobi.

Kenya, Republic of (1981). The integrated rural surveys 1976-79. Nairobi: Ministry of Economic Planning and Development, CBS.

Livingston, I. (1981). Rural development, employment and incomes. Addis Ababa: I.L.O.

Nelson, C. (1997). Training goes to market a comparative study of two Kenya training programs. Micro enterprise Best practices. USA.

Obura, A.P. (1993). Education as support or hindrance to small and intermediate size enterprise in Africa. Nairobi : University of Nairobi, IDS.

Ondeng, P. 1989. How to start your own business. Nairobi: Enterprise Publications Ltd.

Parker, J. T. (1994). Micro and small enterprise in Kenya: Results of the 1993 National baseline survey. Nairobi: Gemini.

Shibanda, G.G. Optimizing fisheries information for decision making among Kenyan fish pond smallholders. Library Review, 48 (7 & 8).

Supe, S.V. (1983). An introduction to extension education. New Delhi: Oxford & IBH Publishing.

Yambo, M. (1992). Training needs assessment of the Kenyan informal sector. Nairobi: KREP.

Williams, C.R. (1980). Skills formation in Kenya informal economy. Nairobi: University of Nairobi, IDS no. 362.

Business-Focused Evaluation: A New Collaborative Model

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A case study of a business-focused evaluation model is presented. This was developed as part of an organizational development intervention for a global semi-conductor company. The value of the model is assessed against three principles (concerning collaboration, joint ownership and integration) drawn from client and provider needs and from current thinking in evaluation research. Findings from the study highlight significant benefits to the Company and participants, and provide learning for future use.

Keywords: Evaluation, Strategic, Integration

Debate in the field of evaluation research and methodology indicates a number of key issues that are central to evaluation utilization. These include a drive towards interactive and participatory interventions that develop relationships with stakeholders and attend to the needs of those who are being evaluated and those who are evaluating (Gregory 2000; Pawson & Tilley 1997). Furthermore there is concern that interventions recognise the importance of how the evaluation process is managed as well as addressing the outcomes of the evaluation enquiry (Patton 1997, 1998; Kaghlan et al, 1999). Both of these issues link into the concept of evaluation as an intervention integral to organizational learning and as part of an organizational development process that aims to influence strategic decision-makers (Owen & Lambert 1995; Preskill & Torres 1999a, 1999b; Torres et al, 1996).

Current literature appeared to offer little in the way of models and tools that reflect these current issues and that could be used to evaluate a University led intervention. This paper presents a case study outlining the design, development and implementation of a business-focused collaborative model of evaluation that aimed to provide a link between research and practice and academia and industry. The paper begins by introducing the context and aims of an organizational development intervention requiring evaluation. This is followed by an exploration of how an evaluation model has been designed around key principles identified by the organization (Zetex plc) and Lancaster University and drawn from current evaluation research. The data analysis and findings from use of this working model are presented. The extent to which the model supported the key design principles is discussed and a number of areas for improvement are suggested. The paper is concluded by summarising the key learning from the study.

Context of organisational development intervention

Zetex plc is a global semi-conductor company with headquarters in the North West of England. In 1998 the company worked with Lancaster University to design a management development programme that would develop middle and senior managers. The programme was designed to run over one year on a part-time basis, comprising 4 modules of 3 days and leading to a Lancaster University Certificate in Management. Participants attended four tutorials and produced four assignments linked to each module, and a final Personal Reflections assignment that aimed to reflect on their learning processes. In addition participants worked as part of a team within action learning groups on a business-focused project that spanned the duration of the programme. The Company initially recruited two cohorts of 16 managers to the programme. One cohort started the programme in October 1998 and the second cohort started in February1999.

The Company and the University were interested in evaluating the intervention in terms of learning, that is learning for individuals, the organization and the University. It was agreed therefore that an evaluation research project would run alongside the first two cohorts of students with the key aims of assessing the impact of the programme on the business, and assessing the impact of the programme on the individual.

It was hoped that addressing these two organizational aims would provide the University with information to address academic concerns mainly, to provide an understanding of how learning impacts upon the organization and individuals thereby enabling further development and promotion of the programme. A further wish was that the

project would increase understanding of evaluation within an organizational context and would act as a test case for including evaluation research in other programmes.

Methodology Rationale

Both the Company and the University had key principles that they wanted to underpin the evaluation. The Company wanted an approach that would clearly link into their strategic measures, and that would enable the identification of specific and tangible, actual and potential benefits to the Company. The University wanted an approach that was integrated with the organizational development intervention and enhanced the learning for participants. It was therefore agreed that there were three basic principles that would underpin the approach used to evaluate the Zetex management development programme. The three principles were:

Principle 1. The evaluation was to be developed collaboratively by the University team (evaluation researcher and programme director) and the Company (board members and senior managers) and, crucially, the students on each cohort. This linked into previous research by Stead at Ford Motor Company (1997) that showed that programme participants are the critical link between University learning processes and business outcomes.

Principle 2. The evaluation was to be a jointly owned process between the University and the Company and therefore would have the capacity to deliver longer term sustainable benefits to both parties. This principle draws on research into participatory and collaborative inquiry and evaluation (including Gregory 2000; Guba & Lincoln 1989; Heron 1996) and work by Owen and Lambert (1995) that argues that evaluators need to work interactively rather than at a distance and that evaluation needs to strive towards informing the 'mental models' of leaders and key decision-makers within organizations.

Principle 3. The evaluation was to be an integral part of the learning process within the programme, and should link into existing strategic measures used by the Company. This principle is supported by Preskill and Torres (1999a, 1999b) within their concept of evaluative enquiry, that argues the need to develop evaluation as "an integral on-going process that contributes to individual, team and organizational learning" (1999b, p. 93).

There are many models and techniques to draw upon in the field of evaluation (for example, see Brown & Seidner, 1998; Kirkpatrick, 1998), however there appeared to be little that provided a fit with the three principles outlined above. Preskill and Torres (1999a, 1999b) identify seven processes at the heart of evaluative enquiry that aim to facilitate learning for individuals, teams and organizations and that might be used as a framework. However, they recognise that evaluators will need to develop new tools if 'they wish their work to contribute significantly to the future success of organizations' (Preskill & Torres, 1999b, p. 93). This management development programme afforded the opportunity to develop new tools that would aim to work within the concept of evaluative enquiry as outlined above and that would suit the specific needs identified by the University and the Company.

Evaluation Design.

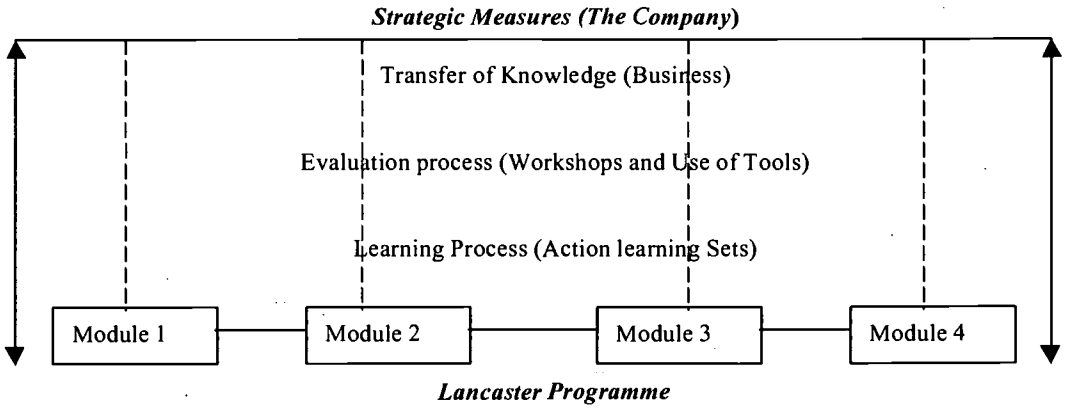
As part of the management development programme students were asked to devise, develop and deliver a business project that would bring together their learning from each of the modules and that would provide a vehicle for using their learning in the workplace. It was decided to use the business projects as a focus for the evaluation research for two key reasons. First, participants were expected to work on projects of benefit to the Company and this then encouraged explicit linking into Company needs. Second, participants were expected to develop projects that reflected their learning from each of the programme modules thereby enabling a more explicit linking of application of learning to work. The evaluation would aim to take this critical reflection of learning and connect it to existing strategic measures and key business areas within Zetex plc. This qualitative approach aimed to; help students review their application of learning throughout the programme and project work; specify actual and potential achievements by students, and; provide a framework to review progress on a longer term basis. Figure 1 shows how the evaluation process was integrated within the organizational development intervention.

With broad principles in place and a key learning focus within the programme for the evaluation, programme students and Zetex board members and managers were invited to a Project Launch Workshop at the Company. The workshop was facilitated by the programme director and evaluation researcher as the first part of the evaluation process with the aim of developing evaluation tools for the programme. It aimed to do this by identifying and agreeing what generic factors are essential for projects to be deemed successful for the Zetex business, and the development of Zetex managers. The workshop also aimed to identify participants' hopes and concerns in undertaking the projects, and to clarify the purpose of the projects and create a pool of potential projects.

Working in mixed groups participants, managers and board members flagged up hopes and concerns and identified success factors relating to projects that were then divided into two broad categories. These categories

were labelled hygiene factors and critical success factors. Hygiene factors were those factors that have to be in place before a project can proceed such as; 'needs to have clear objectives and goals'; 'projects should address a high leverage issue'. Many of these factors related directly to hopes and concerns, for example a hope that the project would be of value to the business, a concern that the projects would have senior management backing. Critical success factors were those factors deemed successful to the Company and to the participants' development. Critical success factors included areas such as; 'improved communication', 'add value to the business'. A pool of potential projects was then created by asking participants to place ideas within one of the Company's four key business areas; strategic, operational, business processes and innovative. These were later circulated so that participants could work on them to produce project proposals.

Figure 1. Organizational Development Intervention



Evaluation Tools

The hopes and concerns exercise and the hygiene and critical success factors identified at the workshop were used to develop three tools;

The *Project Checklist* was designed from the identified hygiene factors to set the context for the application of learning to the workplace. Project teams used the checklist to ensure that their project had the appropriate characteristics in place before proceeding. The project checklist included questions that project teams needed to consider, for example 'will your project be easily applicable to the business?' Once project teams had completed a checklist, both the Company and the University considered and agreed the proposal. The project checklist was not designed as an evaluation tool but was key to the evaluation process in that it enabled participants to take ownership of the process and to be clear about what they were aiming to achieve and its relevance to the business.

The *Critical Success Factors Map* (CSF Map) as shown in Figure 2 was designed to incorporate the ten broad critical success factors identified at the workshop. This map formed the core of the evaluation process. It aimed to enable participants, the Company and the University to assess the impact of projects upon the Company and upon team and individual learning, by mapping actual and potential benefits. Actual benefits were those that came as a result of the project and could be quantifiable and tangible, for example cost savings or a new product, or intangible, for example improved morale. Potential benefits were those that the project team anticipated as a result of the project and could be quantifiable and tangible, for example increased efficiency, or could be intangible for example, better image. It was expected that benefits would be different for each project and that not all project teams would be able to identify benefits relating to all critical success factors.

A *Personal Benefits Matrix* was the third tool. It aimed to assess the impact of learning upon the individual and included two broad 'hopes' identified by participants at the workshop. These hopes were 'greater awareness and development', and 'gaining new managerial skills'. The matrix was a simple listing of students' benefits and insights from the Personal Reflections assignments against the identified hopes.

Figure 2. Critical Success Factors Map

CRITICAL SUCCESS FACTORS:	ACTUAL BENEFITS	POTENTIAL BENEFITS
HOW WILL THE PROJECT –		
1. Add value to the business in the short to medium term?		
2. Have potential for impact on the business over the next 3-5 years?		
3. Enhance customer relationships (Internal/External)?		
4. Mobilise commitment and support from within the Company?		
5. Demonstrate communication across boundaries within Zetex?		
6. Provide opportunity for influencing/networking throughout the management of the Company?		
7. Demonstrate the effective management of team performance?		
8. Demonstrate the opportunity to test out the 'Lancaster Learning' in a work context?		
9. Offer the opportunity for experimentation and innovation?		
10. Create a learning environment where change is embraced?		

Data Collection and Analysis

Participants collected data for the CSF Maps in self-managed action learning sets. As part of their project work, project teams met regularly in self-managed action learning sets to reflect, plan and talk through and resolve issues concerning their project. Each cohort of 16 participants had three project teams, thus six project teams in total. The CSF map was introduced to participants as a way of critically reflecting on their learning at regular intervals. Each project team completed a CSF Map at the start of each project and provided a final completed version for the evaluation research following project completion. The map was completed by specifying actual and potential benefits from each project for each of the identified factors. Project teams also used the CSF Map as an aid to developing their final project presentation to provide evidence of how their project had benefited the company. The Personal Benefits Matrix was completed by the research team for each cohort at the end of each programme by identifying and mapping key benefits and insights from the Personal Reflections assignments completed by all participants. The six project teams are detailed in Figure 3.

Figure 3. Project Teams

P1 Evaluate and review group purchasing process	P5 Address cultural and technological communications problems
P2 Understand why 'crash' teams succeed	P6 Explore how working practices constrain productivity, efficiency and creativity
P3 Identify weaknesses in human communications	
P4 Assess methods of budgeting and re-forecasting	

Information from the Critical Success Factor Maps (CSF Maps) and the Personal Benefits Matrices of both cohorts of participants were analysed by linking into 8 broad areas that corresponded with existing Company business areas and strategic measures, as shown in Figure 4. The findings were then fed back to the Company and programme participants through a workshop where participants, board members and managers were asked to comment and add to the findings. Clearly there was an overlap between projects and areas, and the findings below aim to draw out some of the more salient examples. For many of the project teams their work was the opportunity to test out new ideas and learning and so represents the start of potential projects that could be carried forward by the Company. This inevitably means that there are more identified potential than actual benefits to the business. The findings also include data drawn from the Personal Benefits Matrices.

Figure 4. Areas of Analysis

Business Areas	Strategic Measures
Strategic	Financial
Operational	Customer
Business Processes	Internal
Innovative	Learning and Growth

Findings

Business Areas

Strategic. Projects within the strategic area were defined as those projects that related to future business strategy or would impact on the development of new strategy. An example of actual benefits in this area is P5's work of an identified strategy for improved global teamworking to include virtual teams. P6 piloted a flexible working system with the potential benefits of more efficient use of staff time and reduction of staff turnover.

Operational. Projects within the operational area were those that related to Company operational activities, for example systems improvement. A clear actual benefit is P3's development and implementation of a new product idea handling system drawing together managers from across the Company. Potential benefits include P4's recommendations to improve existing budgeting procedures with the introduction of cross company sessions to clarify and identify budgeting information needs for new managers.

Business Processes. These were projects that related to key business processes within the Company for example communications. All of the projects have benefited Business Processes in that they have been working in cross boundary teams and have been researching in different parts of the Company. A further benefit in this area would include the potential impact on customer and supplier relations and reduction in time wastage with the implementation of an e-commerce purchasing system piloted by P1.

Innovative. These were projects concerned with experimentation and new ways of doing things, for example design of a new system. All of the projects fitted into this category. For example new ways of working include P1's work on the development of e-commerce, P2's teamworking practices, P4's work on budgeting and P6's investigation of flexible working practices. New systems development includes P3's development of a product idea handling system and P5's work on an intranet employee directory.

Strategic Measures

Financial. This included projects impacting on the Company's financial measures for example, increased cost revenue. Projects in this area were only able to anticipate financial benefits at this stage. For example, P3's new product idea handling system anticipates increased orders and revenue when implemented. P6 anticipate reduced time to market with the implementation of more flexible working practices and cost savings with reduced staff turnover.

Customer. These were projects that impacted on internal and external customers of the Company. Actual benefits have been evidenced by all the projects in that they have become more efficient at team-working, and they have learned how to work inter-departmentally. P1 have improved supplier relationships by working with suppliers to develop a new purchasing system. P5 anticipate improved global communications including customer and supplier relationships with recommendations for virtual teams.

Internal. This category included benefits to internal systems and processes. Actual benefits evidenced by all projects include reduced inter-departmental barriers, increased business understanding and improved internal networking as a result of project teams working across departments and functions to develop their projects. One specific example is P4 who have improved relations between finance and its customers by investigating ways of developing more efficient budgeting procedures. P2 and P5 focused particularly on Company team development and global teamworking issues, and potential benefits here include a more harmonious workforce and improved employee productivity.

Learning and Growth. This included benefits to the Company and individuals, for example use of skills to effect change, and included data collated from the Personal Benefits Matrices. In this area there have been a range of actual benefits, evidenced by all teams including improved team management skills, development of new ways of

working, use of models and theories from the programme to promote and effect change, and increased willingness to learn and change. Individuals believe they have benefited greatly from working on the projects in their learning as part of a team, and in their personal development. Examples cited include increased confidence, a broader and more strategic outlook, improved management skills and the acquisition of relevant and useable theory and models.

Discussion

While the findings clearly show evidence of application of learning from the programme to the workplace, to what extent has the model enabled the initial aims of the evaluation to be met, that is to assess the impact of learning upon the organization and on individuals? Also to what extent has the evaluation model supported the three methodological principles determined during the design phase, and what suggestions does this raise for further use of this model?

Initial Aims. The findings from the completed CSF Maps detail a range of actual and potential benefits from the participants' project work to the organization and to groups and teams within the organization. The data also shows that these benefits can be related to Company strategy and have particular relevance in identified business areas. Data from the Personal Benefits Matrices indicate that learning has impacted upon individuals both personally and professionally. However the approach raised two issues concerning the aims. First, the collated data from the CSF maps offer more evidence of potential benefit than of specific actual benefit. This is not necessarily problematic or disappointing in that it does reflect the nature of the programme. For example many of the projects undertaken were concerned with development of innovative systems and procedures that were not implemented by the end of the programme and would require further detailed project planning. Therefore it is more probable that actual specific and tangible benefits of a project may not be evident for some time. This would then suggest that if the true benefits of the learning programme are to be made visible, a longer term approach to the evaluation intervention is negotiated with the Company. Second, examples of benefits provided by participants were not always detailed enough to provide clear evidence. This issue identifies a need for greater facilitation of the process and calls for increased integration of the evaluation process with the learning programme. This issue is addressed in more detail below.

Principle 1: A Collaboratively Developed Process. The development of the evaluation aimed to be collaborative and to include the University team, senior Company representatives and the participants. In practice the development occurred as the result of the University team managing a number of collaborative relationships and development events across the three stakeholder categories. For example the University took the lead in working with the Company to determine underlying principles and the key focus within the learning programme for the evaluation. The University facilitated a workshop for the participants and the Company to identify critical success factors and areas for the Personal Benefits Matrix. Having a clear understanding of which party was to manage and facilitate the collaborative relationships worked particularly well in the start up phase where there was commitment to getting the process up and running and an urgency to meet programme deadlines. However, collaboration became more difficult to achieve after the initial start-up when there was less urgency and focus on evaluation. In terms of developing the evaluation process it meant that some key steps were missed. This included taking the developed tools back to participants to check clarity and understanding from their point of view as product users. While this would have incurred extra time and cost in the start-up phase, this could have made a crucial difference to the detail and specificity of the data obtained.

Principle 2: A Jointly Owned Process to Deliver Long Term Sustainable Benefits. The initial workshop where participants and the Company worked together to identify project ideas, hopes and concerns and critical success factors, set a strong foundation for joint ownership of the evaluation process. It made explicit the link between the programme, the organization, the project teams and the individual, and it clarified purposes and aims of the projects. As in the development of the evaluation process the commitment to joint ownership can be seen to hinge upon clear management and facilitation of the process. This is particularly evident from the way in which the evaluation continued. Participants worked on projects in action learning sets and were expected to use the CSF Map as a self-managed reflective tool. The data collation process indicated that a more interactive stance with participants in managing the process throughout the programme duration would have provided greater detail and clarity of data as well as dealing with any issues about the evaluation as they arose. This would also have avoided the need for the researcher to try and clarify points and add detail at the end of the process. The need to actively manage joint ownership is further highlighted by the issue of feedback. It had been agreed at the programme start-up that the University would feedback to the Company through reports and a final workshop. However while the nature of the feedback had been clarified, the way in which this was to be managed and the purposes of the feedback

had been given less attention. This meant that the Company was disengaged from this process and therefore the final workshop acted as an information giving session rather than as an organisational development intervention.

Principle 3: Integral to the Learning Process and Linking into Company Strategy. The approach of developing the evaluation tools collaboratively and using the CSF Map as a basis for critical reflection within action learning sets proved very successful in linking the learning, the evaluation and the assessment into the business. The explicit link between learning and Company strategy was reinforced by analysing the data within the Company's key business areas and strategic measures. It was felt that more learning could have been gained by the Company and the participants by linking the evaluation process more tightly into the learning programme and in particular into the assessment process. For example the CSF Map as a critical reflection tool could act explicitly as a preparation for the Personal Reflection assignment where participants are asked to reflect on their learning and what has been of most value to them. A closer link into assessment might also achieve greater joint ownership and developmental collaboration, in that the evaluation process becomes more visible throughout the programme duration and must be attended to as an ongoing process.

The pilot of this evaluation approach also highlighted the need to develop a more collaborative and integrated way of assessing the impact of learning upon individuals. Although the criteria for the Personal Benefits Matrix were developed at the initial workshop by participants, the matrices were completed at the end of the programme by the University. This tool was therefore not integrated into the learning process, and did not have the same level of ownership as the CSF Map. Interpretation of the data from the CSF Maps showed that many of the benefits to the organization were also benefits to the individual for example, 'improved team and management skills'. This suggests the potential for including criteria for individuals in the main evaluation tool, thus linking the whole process more clearly into the learning programme. In addition, the inclusion of criteria targeted at individual development as well as organizational development would provide a more holistic and integrated focus for critical reflection by attending to team concerns (the project), personal development (benefits to the individual) and the organization (benefits to the Company).

A final workshop at the end of the programme presented feedback to the Company and participants. While the workshop explored the findings from the data there was limited exploration of how further development might continue. The close proximity of the workshop to final project presentations and final completion of the CSF Maps suggests that a workshop might be better placed some months after the end of the programme. This would enhance the potential for long term sustainable development by providing a focus for review of developments. It would also give time for some of the learning and development to be embedded within the organization, independently of the learning programme.

Conclusions

The development of a new business-focused collaborative evaluation model has brought a number of major benefits including:

- Identification of specific and tangible, actual and potential benefits to the Company.
- Identification of benefits to the individual
- The articulation of business benefits relevant to business performance measures
- Provision of a reflective review process and review mechanism for the organizational development intervention.
- The opportunity for the University to trial a new evaluation model

The findings have shown that for Zetex the business projects have brought key benefits to the organization and to individuals particularly in the development of new ideas and systems that could potentially have a long term and sustainable impact upon the Company. While many of the benefits specified are potential benefits there are a number of clear actual benefits particularly in terms of learning for the business and in terms of developing improved communications and internal relations within the Company. Of particular interest is the number of innovations developed and piloted through the business projects with the aim of improving Company productivity, technology and market share. The findings also show that individuals gained enormously from being involved in the development of business projects. This increased confidence and self-esteem has had a beneficial effect in the workplace in terms of feeling more able to make decisions, to suggest improvements and to carry them through.

The evaluation process has aimed to be a collaborative and jointly owned process between the university, the Company and the participants. It has also aimed to be integral to the learning process and to link into Company strategy. Overall the pilot has been successful in achieving its aims and has identified some key learning points for the research team and highlighted a number of areas for improvement to the overall process.

The pilot has provided the opportunity to trial a new evaluation model linked into current evaluation research thinking. This has reinforced the need to attend to process both in how process is managed with other stakeholders in the initial start-up and in the ongoing development phases. Attention to process management has also been shown to be crucial in how participants work with the evaluation within the organizational intervention, for example having an opportunity to check understanding, and using the evaluation process as a learning tool. Working within a joint owned process has also raised the issue of commitment. For example, the pilot has indicated the need for stakeholders to think beyond the evaluation to how tools, frameworks and processes can help continued development within the organization. There has also been a clear indication from the pilot that there is potential in adding to the learning from the evaluation and adding to the value of the programme by linking this approach more tightly into the assessment process.

In conclusion our learning from this evaluation research has developed the basis for a strategic approach to evaluation as part of a learning and organizational development process. The evaluation model is now being refined and developed across a range of work-based and academic qualification programmes within Lancaster University.

References

Brown, S. M., & Seidner, C. J. (1998). Evaluating corporate training: Models and issues, Norwell MA: Kluwer.

Gregory, A. (2000). Problematizing participation: A critical review of approaches to participation in evaluation theory. Evaluation, 6 (2), 179-199.

Guba, G., & Lincoln Y. S. (1989). 4th generation evaluation. California: Sage.

Heron J., (1996). Co-operative inquiry: Research into the human condition. London: Sage.

Kearns, P. (1998, December). When the old methods can be madness. People Management, 3, 17.

Kirkpatrick, D. (1998). Evaluating training programs: The four levels (2nd ed.). San Fransisco: Berrett-Koehler.

Owen, J. M. and Lambert F. C. (1995). Roles for evaluation in learning organizations. Evaluation, 1 (2), 237-250.

Patton, M. Q. (1997). Utilization-focused evaluation (3rd ed.). Thousand Oaks, CA: Sage.

Patton, M. Q. (1998). Discovering process use. Evaluation, 4 (2), 225-233.

Pawson, R., & Tilley, N. (1997). Realistic evaluation. London: Sage

Preskill, H., & Torres, H. (1999a). Evaluative enquiry for learning in organizations. Thousand Oaks, CA: Sage.

Preskill, H., & Torres, R. T. (1999b). The role of evaluative enquiry. In M. Easterby-Smith, J. Burgoyne, & L. Araujo L. (Eds.), Creating learning organizations in organizational learning and the learning organization: Developments in theory and practice. London: Sage

Rawson, M. (2000). Learning to learn: More than a skill set. Studies in Higher Education, 25 (2), 225-238.

Stead V. (1997). Influences on individuals' application of learning: A grounded theory study and its evaluation. Doctoral dissertation, Lancaster University.

Stern, E. (2000). Editorial. Evaluation, 6 (1), 5-6.

Torres, R. T., Preskill, H. S., & Piontek, M. E. (1996). Evaluation strategies for communicating and reporting: Enhancing learning in organizations. Thousand Oaks, CA: Sage.

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Challenges in Measuring and Evaluating Diversity Efforts in HRD

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This article examines the challenges faced by practitioners and scholars interested in evaluation and measurement of diversity efforts in organizational contexts. An organizational systems model illustrating the diversity related interchanges between an organization and the macro environment are considered. The challenges to measurement and evaluation due to the latency of the diversity, performance and performance improvement constructs are examined.

Keywords: Diversity, Evaluation, Performance Improvement

Practitioners and researchers are currently in pursuit of greater understanding regarding the impact of diversity and diversity management practices on organizational performance. In the interest of performance, global or multinational corporations frequently develop strategic approaches to enhance the likelihood of success in expanding market share among an increasingly global community of customers (Albert, 1994; Dass & Parker, 1996). Recruitment, hiring and retention of a diverse workforce are essential for organizational success in an increasing number of localities and industries. Since the late 1980s, many organizations have engaged in a response to workplace and marketplace diversity through initiatives focused on the management of customer, supplier and employee diversity (Kossek & Lobel, 1996). Regardless of the approach to diversity, organizations are engaged in developing more specific knowledge regarding the measurement of outcomes of diversity efforts and how they might be improved (Wheeler, 1996).

Purpose of the Paper

This paper explores the question: What are the current challenges to measuring the effectiveness of organizational diversity efforts? The exploration of this question will be accomplished through a review of the literature, description of current organizational practices associated with diversity efforts and an analysis of related approaches to measurement and evaluation. The limitations to measuring and evaluating the effectiveness of diversity efforts will be explored at the organizational systems level.

Defining Diversity

Many organizations have adopted definitions of diversity that are broad in scope (Wheeler, 1996). "One of the most powerful concepts underlying successful diversity initiatives is a broad, inclusive definition of diversity" (Hayles & Russell, 1997, p.11). Broad definitions extend beyond a categorization system centering on race, gender, age and disability to include a variety of differences. Thomas (1999) emphasizes that definitions of diversity should not focus exclusively on minorities and women in the workforce, but instead should include "any collective mixture characterized by differences and similarities" (p. 50). Although many organizations maintain a broad definition of diversity, communication and practice often focus more narrowly on categories associated with equal opportunity employment (Thomas, 1999). For the purposes of this paper, the definition of diversity will be the mixtures of individual characteristics in the context of an interdependent human system whereby associated similarities and differences or perceptions of similarities and differences influence norms, behaviors, interaction, and performance. The term diversity effort will be used to describe an activity designed to support the definition and diversity related goals for an organization.

Conceptualizing the Forces Influencing Organizational Diversity Efforts

Johnson (1995) found that over seventy percent of Fortune 500 companies either had or were planning diversity efforts. The following four forces can be identified as strong influences on United States and global diversity

efforts: diversity action, diversity inquiry, diversity knowledge, and diversity infusion. The concept of diversity forces relates to a collection of events that influence organizational decisions to engage in diversity efforts. These diversity forces are defined at the macro systems level and work across systems, influencing and being influenced by the components of the system such as organizations, groups and even individuals (Jacobs, 1989; see discussion on systems theory below).

Diversity action is any activity, program, law, policy or process that influences collective perception and behavior regarding similarities and differences within human systems. Diversity inquiry is the act of examining the existing collective process as it pertains to the normative, behavioral and perceptual influences of similarities and differences in a human system. Diversity knowledge is the insight gained individually and collectively that influences reasoning, interpretation, planning and action within a human system. Diversity infusion is the ongoing introduction and integration of persons into a group, organization or community or the development of awareness of underlying characteristics resulting in increased explicit heterogeneity of a human system.

Diversity action is associated with diversity related legal parameters for organizations, protests against organizations perceived to be discriminatory, and celebrations of ethnic or cultural identities. Diversity action is evidenced in the workplace and the marketplace (Cox, 1994). As diversity awareness in organizations has increased, so has diversity inquiry that involves organizations becoming active in researching specific market trends, consumer demographics, and potential for increasing new demographic market segments. Organizations also responded to customer and worker inquiry regarding organizational behavior and commitment to diversity (Wheeler, 1996). Political campaigns, organizational advertising and public service announcements began to focus on diversity. Increases in related activity have produced greater interest in diversity knowledge. Public and corporate interest in diversity sparked the publication of numerous books, articles and videos along with extensive media coverage of diversity issues. The increased focus on diversity led to training that increased diversity knowledge (Hanover & Cellar, 1998). Changes in organizational openness to diversity issues and the introduction of larger numbers of persons with visible differences contributed to diversity infusion. This influx of new people increased heterogeneity of organizational membership (Judy, 1997). The culmination of macro environmental forces associated with diversity led to multifaceted organizational approaches to addressing diversity issues among many organizations (Kormanik, Krieger & Tilghman, 2000).

Diversity efforts have been tied to organizational goals (Wheeler, 1994). "Practitioners agree that multiple elements are essential in the process of creating an environment that values diversity. No single approach is sufficient" (Wheeler, 1994, p. 21). The reason for a broad approach to diversity efforts is that the issues or drivers are too complex. In a study of diversity efforts in several large corporations, Wheeler (1996) identified six key areas of emphasis including: communication; education & training; employee involvement; career development and planning; performance and accountability; and culture change. These areas suggest the possibility for a systematic approach. "A systematic approach that addresses issues at multiple levels through planned stages with continuous reinforcement over time is characteristic of diversity pioneers" (Wheeler, 1994, p. 21).

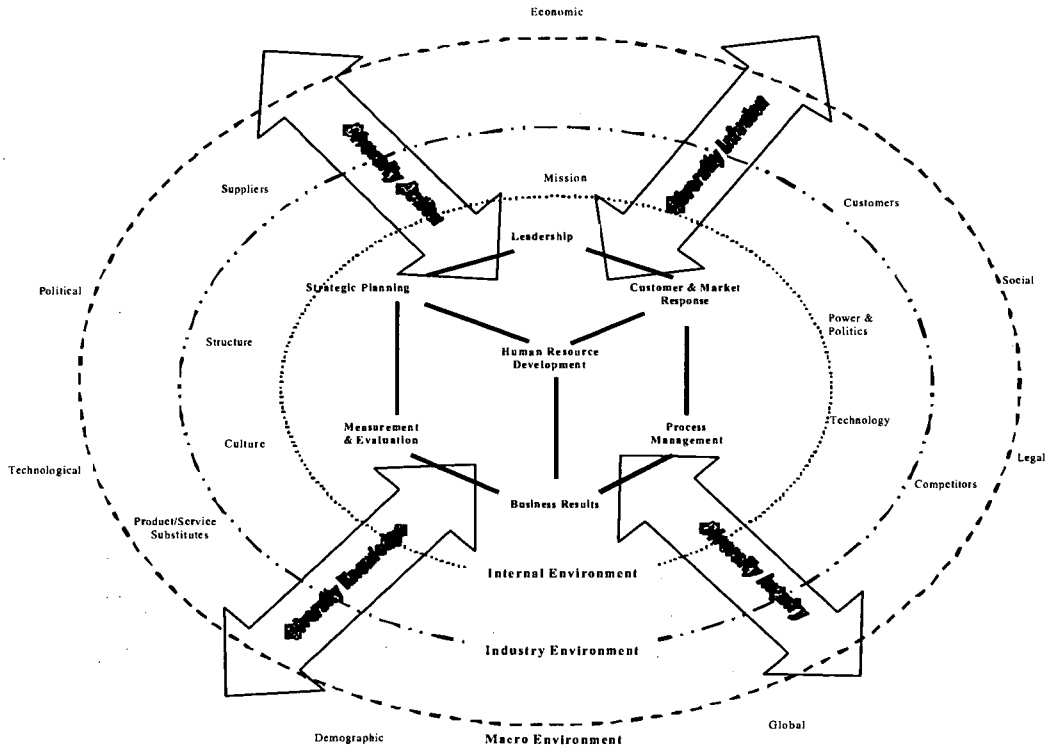
An Organizational Systems Model for Diversity

The first part of the systems model below (depicted in the cube formation at the center) represents seven key organizational practices in alignment. The cube is situated within the permeable internal environment of the organization. Because the model is located in a naturalistic environment, alignment and realignment are ongoing. The lines representing the edges of the cube do not dominate the relationships between each element. Rather there is interchange between the permeable walls of the cube, so that each practice area influences the other, though not necessarily in a proportionate manner. Although every organization is unique, these core practice areas must be addressed to one degree or another in all organizations. Ineffective management of one or more areas, due to lack of systematic maintenance results in the organization becoming misaligned.

The core practices making up the cube are modified from the Malcolm Baldridge Award (George, 1996). To align the practices, measures must be derived and monitored. Alignment is important to the success of organizations, but often difficult to accomplish. Although alignment may not guarantee organizational success, misalignment is problematic (Semler, 1997). The model represents an organization striving to maintain alignment between key areas of practice. The organization system uses evaluation, measurement, planning and readjustment in an ongoing attempt to stabilize itself.

The second part of the model represents the macro system environments and includes the internal organizational, industry and macro environment. Permeable lines signify the interchange between these environments. The macro environmental features that may influence the industry and internal organizational

Figure 1. A Diversity Focused Organizational Systems Model



environment are global, demographic, technological, political, economic, social, and legal factors. Industry environmental features include: competitors, product and service substitutes, suppliers, and customers. The double tipped arrows depict diversity forces. The arrows represent the dynamic interchange occurring across all levels of the system. Organizational responsiveness to the diversity forces as they permeate the organization impacts personnel, policies, new issue related insights, and questions. The organization in turn initiates interchanges that influence the industry and macro environment.

The three sections described and depicted above represent an open system where permeable boundaries allow for a constant state of interaction. These dynamic interchanges demand that the organization make ongoing adjustments to diversity forces. The interchange may be viewed as providing challenges and opportunities in the organization. The organizational reaction to the environment is often dependent on the information gathered through evaluation or measurement. Additional information may provide an opportunity for the organization to define interchanges with diversity forces as an opportunity.

Awareness of existing diversity issues within the organization obtained through diversity inquiry and knowledge combined with the interactions within an increasingly heterogeneous macro system present new challenges. The organization is positioned to maintain short and long term goals in the face of conflicting stakeholder interests. For example, managers may be expected to meet the demands of shareholders for return on investment, customers for quality and affordability, employees for fair wages, and communities for pollution control (Dass & Parker, 1996). The fact that organizational stakeholders at all levels of the system rarely agree is combined with the uncertainty that "investment in diversity" is a profitable strategy. At the same time, the organization has an opportunity to influence the industry and the macro environment with regard to diversity actions such as policies regarding supplier relationships or the creation of products addressing a certain segment of the available market.

Organizational Systems Theory in Measurement and Evaluation

Argyris and Schön (1996) have emphasized the importance of systemic approaches to organizational planning and evaluation through their work on organizational learning. There is limited available scholarly literature regarding

diversity at the organizational systems level (Hayles & Russell, 1997). Dass and Parker (1996) developed an open systems model that represents the permeable borders between organizations and their macro environments. The model represents the open systems environment interchange that occurs between the industry environment, and the organizational environment. According to Dass and Parker, organizational members must be aware of both internal and external concerns associated with diversity in order to be in the best position to add value and to achieve a long-term strategic advantage for the firm. Strategic management is important for ongoing and flexible processes in which organizational leaders define organizational mission, set goals and priorities at various levels, and develop and implement means to achieve them.

From the practitioner literature, the Griggs (1994) model focuses on "systemic human resources and management development challenges". This model is segmented into six parts including: total quality, change, leadership, productivity, relationship, employee participation, and new work formats. The model provides an opportunity for the understanding of various linkages and ways in which a business environment is impacted by diversity. Hubbard's (1997) "Diversity 9-S Framework" (strategy, structure, systems, skills, staff diversity, style, shared values, shared vision and standards) utilizes an approach to measuring organizational diversity efforts. Although systems theory is not the explicit focus, the stated intention of the 9-S Framework is to be comprehensive at the organization level. Most of Hubbard's measurement formulae are modified from the existing human resources measurement literature, particularly the work of Fitz-Enz (1984). Although Hubbard's model and measurement concepts appear to have been widespread in business and industry, the underlying theory of and results from the approach are unknown. Hubbard's model, however, is one of the most thorough to date because of its attempt to conceptualize a broad array of human resource issues associated with diversity.

The Role of Diversity Measurement and Evaluation in Organizational Contexts

The most common utilizations of organizational measurement and evaluation are prediction, explanation, management of programs, and the maintenance and sustainability of current and future performance (Holton, 1997). Measurement and evaluation can be used to influence planning. Planning is often a product and mediator between diversity evaluation and measurement, and provides the drivers for performance improvement that are linked to organization success (Kaplan & Norton, 1996). From this perspective, measurement alignment is important to the success of organizational functioning (Semler, 1997). Alignment denotes linkages among an organization's strategic plan, organizational management style, reward and recognition systems, and external customer concerns. Rummler and Brache (1995) suggest that data collected related to the organizational context represent the performance situation and form the basis for making decisions. Managers may use data to monitor core organizational systems and processes; employees may use the same data to improve individual job performance. Data can also be used as a communication medium among managers and employees for identifying current and expected performance.

Measuring organizational performance to include diversity related performance offers the opportunity for higher levels of sophistication in approaching measurement in the organizational context. Evaluation of organizational practices from a systems perspective presents more complexity. When measurement and evaluation are well defined they can be better understood and implemented. Decisions regarding the use of attributes or indicators are requisite for individual, team and organizational success in improving performance (Sleezer et al. 1998a). There are necessary linkages between evaluation, measurement and planning of diversity efforts (Thomas, 1999).

Evaluation and Measurement of Diversity Efforts

Although several organizations have been involved in diversity interventions for more than a decade, there is limited evidence of evaluation associated with diversity initiatives in the HRD literature. Even fewer articles or reports exist regarding the scope and quality of those measures (Wentling, 2000; Wheeler, 1994). Comer and Soliman (1996) emphasize the importance of evaluating the results of diversity efforts. "Evidence of diversity's impact on the bottom line has not been systematically measured and documented for easy retrieval and use" (Robinson & Dechant, 1997, p. 21). To date, most academic research has been primarily concerned with the impact of race and gender in dyadic relationships and groups (Kossek & Lobel, 1996; Richard, 2000). Applied research has focused on the management of workforce diversity including recruitment, hiring, selection, and utilization of diversity (Richard, 2000).

Recent findings indicate that organizations have begun to acknowledge that measurement of diversity efforts is of importance and have begun to engage in evaluation practices associated with diversity initiatives

(Wentling, 2000). In Egan's (2000) study of US corporations, approximately seventy-five percent of respondent organizations reported some use of evaluation measures associated with diversity efforts. There are, however, indications that evaluation of diversity efforts is new to organizations and that evaluation and measurement effectiveness are of significant concern (Wentling, 2000). Wentling indicates the possibility of an often-narrow use of instrumentation by organizations.

Most of the available reporting of corporate diversity measurement appears to be broad in scope and does not provide adequate information to determine the specificity and frequency of reported diversity measurement approaches. One example is that of Marriott International, Inc. (Tate, 1999). Marriott has taken a business objectives approach. The company has identified measurement as being critical because of a belief that tangible evidence "gets noticed", indicates progress, can be supported in the budget, and is vital to ongoing refinement and adjustment (Tate, 1999). Marriott's existing measurements include: attitude surveys; retention records of minorities and females; EEO complaints filed; documenting representation by minorities and women in senior, middle and entry level management ranks; tracking legal fees and settlement costs for discrimination cases; minority and female vendor and supplier relationships; recruiting and ability to attract diverse candidates; minority and female franchisees; external recognition; and benchmarking. Additionally, rewards to managers are given for: "programmatic and numeric diversity objectives"; examination of corporate policies and practices to ensure that policies are supportive of diversity endeavors; and inclusion of a diversity component in performance evaluations. This example demonstrates the following: 1) the measurements are context specific; 2) there are a range of approaches to diversity performance measurement; and 3) the measurements link two or more performance domains including mission subsystem, process, team, and individual levels (Holton, 1997).

Key Factors to Evaluation and Measurement Effectiveness

Definitions vary for the terms measurement and evaluation. Measurement is most often described as an approach or process for gathering information or data collection. Evaluation has been defined as the determination of congruence between performance and objectives (Mehrens & Lehmann, 1991) and as a process for providing information about activities and organizational elements to influence decision-making. Evaluation has also been defined as a process for determining the worth or quality of something (Worthen & Sanders, 1987).

Kettner, Moroney and Martin (1999) define measurement as a system of rules usually focusing on the process of numerical assignment to phenomena. Nunnally and Bernstein (1994) identify measurement as consisting of rules for assigning symbols to objects. The purpose of these assignments are "scaling" and "classification". Scaling is referred to as the numerical representation of attributes while "classification" determines whether objects fall into the same or different categories with respect to a particular attribute.

Nunnally and Bernstein's (1994) use of the words attributes, rules and scaling are important considerations (Sleezer, Hough & Gradous, 1998a). Attribute refers to our inability to measure an object or characteristics of an object directly. Although we are not able to measure attitude directly, we can measure indicators such as the observed numerical values on a survey instrument. Similarly we may be able to directly measure the size, color and price of an appliance in a store, but we must infer quality by measuring observable indicators (Sleezer et al. 1998a). Most of the elements associated with organizational performance and diversity must utilize proxies.

The term *rules,* as emphasized by Nunnally and Berstein (1994) are also important (Sleezer et al.1998a). The assignment of numbers must be unambiguous and clearly stated. Rules for the measurement of attributes are not always explicit. The rules may be a product of deduction, be based on previous experiences, flow from intuitions or common sense, or be a product of estimation (Nunnally & Bernstein, 1994). "Because the rules for measuring performance are not intuitively obvious, performance has been assessed in multiple and sometimes conflicting ways" (Sleezer et al. 1998a, p. 64). Some of the examples of process quality measures that do have structured systems of rules for assigning numerical values include ISO 9000 guidelines and the Baldridge Award Criteria (George, 1996; Schlickman, 1998). The challenges presented by such systems are that the rules for assigning numerical values are negotiated and change over time (George, 1996). From the examples above, evaluators creating measurement systems must determine the performance attributes to measure, the indicators that will be used to measure them and the rules for assigning numbers. In order to ensure credibility of the evaluation effort, measures must be reliable, valid and practical. Reliability is associated with consistency and accuracy, and refers to the ability of an instrument to measure the same thing when used several times. Validity ensures the instrument measures what it is intended to measure. Practicality refers to the ability to administer the instrument in a reasonable amount of time with realistic administrative requirements.

Even the best measures are not absolutely consistent (Borg & Gall, 1989). Some organizations participating in diversity related performance improvement efforts survey customers based on specific demographic

categories. One approach to such research is the use of a customer survey to determine product performance. There are several potential sources of measurement error in this case including: the customer, situational factors, survey instrument, and the measurer. Some customers may provide incorrect demographic data, or overstate the use of the product. The environment where the survey is being distributed and collected may not be conducive to produce open disclosure. Accuracy may be compromised if the measurement instrument contains ambiguous questions or the measurer holds unexamined biases or utilizes improper statistical techniques. Measurement error is particularly problematic when attempting to measure abstract and theoretical concepts (Fowler, 1993).

The process for implementing any quantitative measurement system is a product of negotiation and renegotiation over time. Performance improvement measures evolve, as do those individuals who manage and interpret the data (Sleezer & Gradous, 1998b). No measure of performance or of organizational systems is perfectly consistent. Measurement errors, situational factors, measurement instruments, subjects of measurement, and measurers can all contribute to inconsistencies. Although there are ways to control for some errors, inconsistency in measurement will continue to be a challenge for researchers (Borg & Gall, 1989).

According to Borg (1987) there are four main uses of scales in social science research. Interval and ratio scales are often called metric while nominal and ordinal scales are commonly referred to as nonmetric. Scaling refers to the numerical statement that can be made about how much of an attribute is present (Nunnally & Bernstein, 1994). Measuring diversity performance requires the use of the appropriate scale according to the situation and the data. Nominal scales involve typical identifiers that are static along a dimension such as gender or "racial category". Ordinal scales are simple scales that order people, objects or events along some continuum, like organizational rank, but do not report anything about the differences between units on a scale. Differences along interval scales have the same meaning anywhere along the scale such as on a thermostat. Ratio scales have a true zero point, such as salary (Howell, 1992). According to Nunnally and Bernstein (1994) metric measuring scales make available more information than categorical scales and should be used when possible. The addition of metric scales when measuring and evaluating diversity can produce more meaningful and complex indicators of related performance.

The definitions of evaluation and measurement explored above will assist in focusing relevant questions regarding the measurement and evaluation of diversity efforts in organizations. A first question for an evaluator of diversity is: How is diversity defined? How diversity and organizational diversity efforts are defined will determine the selection of attributes. These attributes may be either directly measurable or abstract, latent constructs. Latent constructs cannot be measured but observable indicators that infer the construct can provide measurements. When examining the evaluation of diversity there are several constructs at play, none of which can be measured directly. The three major constructs associated with measuring diversity efforts are diversity, performance and performance improvement. Sleezer et al. (1998b) defines performance in the following way: "Performance consists of processes, accomplishments, and capacities that affect current and future individual, team, and growth in capacities" (p.123-124). Attributes and their respective indicators are used to infer performance. The concept of customer service to a particular demographic group could be used to infer performance results for a business unit. Asian-American customers could be asked questions to elicit information regarding various indicators. By combining the answers, we could develop a view of the customer service construct and ultimately performance. We could also gain a perspective regarding the customer service to minorities construct and ultimately insight on diversity. In the case of both performance improvement and performance improvement of diversity, we must enumerate processes, capacities and accomplishments that are changing or have changed. Once quantified, we can use measurement to gauge attributes of a performance prior to and following an improvement activity or to test attributes of the activity itself (Sleezer et al. 1998a).

Holton (1997) proposed four performance domains for organization systems. The author identified typical metrics that he classified as performance outcome measures or performance driver measures. Sleezer et al (1998a) indicated whether the performance outcomes or drivers were constructs, indicators or not defined. A chart specifying diversity-related measures as constructs or indicators is featured below (Chart 1). Most of the performance drivers and outcomes presented are latent constructs that provide special measurement challenges to those interested in performance improvement. The constructs are difficult to identify by observations, objects or specific events. The challenges are even greater when constructs associated with diversity are included.

Evaluation and measurement of diversity efforts are challenging. In order to measure meaningful outcomes associated with diversity, diversity must be linked to performance and performance improvement. Using measurement to evaluate the effectiveness of diversity is complicated for the following reasons: diversity and performance are latent constructs, as is the concept of performance improvement related to diversity; these latent constructs have multiple attributes that may be confounded by other attributes such that they are not distinguishable; indicators may connect to multiple attributes; multiple indicators exist for each of the attributes; and, as supported by the definition of diversity, each situation being measured involves a unique combination of attributes. The

Chart 1.Typical Performance Outcomes and Drivers for Organizational Systems Associated with Organizational Diversity Efforts

Performance Outcomes	Construct or Indicator	Performance Drivers	Construct or Indicator
Economic Returns by Demographic Group	Construct	Societal Benefits	Construct
External Metrics by Population Sectors	Construct	Societal Beliefs	Construct
Market Share	Indicator	Knowledge Capital	Construct
Profitability	Indicator	Management/Leadership	Construct
Mortality Rate	not defined	Societal Responsibility to Community Diversity	Construct
Customer Diversity	Construct	Customer (needs/satisfaction)	Construct
Quality	Construct	Quality	Construct
Cost	Indicator	Innovation	Construct
Time	Indicator		
Product Features	Construct		
Market Share (in product category; by demographic sector)	Indicator		
Team Effectiveness (& diversity characteristics)	Construct	Team Innovation	Construct
Structural Subunits of Performance	Construct	Team/Group Climate (demographic information)	Construct
Productivity (resource efficiency)	Construct	Management/Leadership	Construct
Internal Metrics	Construct		
Work Outputs	Construct		
Turnover	Indicator	Knowledge & Expertise of Diversity	Construct
Absenteeism	Indicator	Renewal & Growth of Diversity Efforts	Construct
Productivity	Construct	Learning About Diversity Issues	Construct
Individual Output	Construct	Human Relations (diversity related effectiveness)	Construct
		Ethical Performance	Construct

Modified from Holton (1987) & Sleezer et al (1998a
Note: Performance outcomes and their associated drivers are listed horizontally

difficulties involved with these issues along with the relative infancy of diversity efforts in organizations suggest the need for research that builds performance measurement theory and links it to practice.

Conclusion

The challenges discussed above have implications for the measurement of the effectiveness of diversity efforts. Further research is needed to target individual interactions among and between practice areas within organizational systems and between the internal organizational environment and the industry and macro environments. Within each of the interactions examined, diversity related performance situations and their contexts should be studied and the complexities of measuring diversity performance must be acknowledged. Understanding the elements of diversity performance within a particular interaction will provide a baseline for utilizing evaluation to improve diversity-related organizational performance.

References

Agyris, C., & Schon, D. A. (1996). Organizational learning II: Theory, method and practice. Reading, MA: Addison-Wesley.

Albert, R. (1994). Cultural diversity and intercultural training in multinational organizations. In R. Wiseman & R. Shuter (Eds.), Communicating in multinational organizations. Thousand Oaks, CA: Sage Publications.

Borg, W. R. (1987). Applying educational research: A practical guide for teachers. New York, NY: Longman.

Borg, W. R., & Gall, M. D. (1989). Educational research. White Plains, NY: Longman..

Comer , D., & Soliman, C. (1996). Organizational efforts to manage diversity: Do they really work? Journal of Management Issues, 7(4), 470-483.

Cox, T. (1994). Cultural diversity in organizations: Theory, research and practice. San Francisco: Barrett-Koehler.

Dass, P., & Parker, B. (1996). Diversity: A strategic issue. In S. E. Kossek & S. A. Lobel (Eds.), Managing diversity (365-391). Cambridge, MA: Blackwell.

Davis, S. R., & Lucas, J. (1999, February). General Motors Corporation managing cultural change. Paper presented at the second national conference of International Quality and Productivity Center, New Orleans, LA.

Egan, T. M. (2000). Evaluating diversity efforts: Corporate measurement practices. Unpublished manuscript.

Fitz-Enz, J. (1984). How to measure human resources management. New York: McGraw Hill.

Fowler, F. J. (1993). Survey research methods. Newbury Park, CA: Sage.

George, S. (1992). The Baldridge quality system. New York: John Wiley& Sons.

Griggs, L. (1994). Valuing diversity: New tools for a new reality. New York: McGraw-Hill.

Hanover, J. M., & Cellar, D. F. (1998). Environmental factors and the effectiveness of workforce diversity training.

Human Resource Development Quarterly, 9(2), 105-124.

Hayles, V. R., & Russell, A. M. (1997). The diversity directive: Why some initiatives fail and what to do about it. Chicago: Irwin Professional Publishing.

Holton, E. F. (1997). Integrating learning and performance domains in HRD theory. Academy of Human Resource Development 1997 Conference Proceedings. Baton Rouge, LA: AHRD.

Howell, D. C. (1992). Statistical methods for psychology. Belmont, CA: Duxbury Press

Hubbard, E. (1997). Measuring diversity results. Pentaluma, CA: Global Insights Publishing

Jacobs, R. L. (1989). Systems theory applied to human resource development. In D. B. Gradous (Ed.), Systems theory applied to human resource development (pp. 27-60). Alexandria, VA: ASTD.

Johnson, S. (1995). The status of valuing and managing diversity in Fortune 500 service organizations: Perceptions

of top human resource professionals. Academy of Human Resource Development 1995 Conference Proceedings. Baton Rouge, LA: AHRD.

Judy, R. (1997). Workforce 2020: Work and workers in the 21st century. Indianapolis, IN: Hudson Institute.

Kaplan, R. S., & Norton, D. P. (1996). The balanced scorecard: Translating strategy into action. Boston: Harvard Business School Press.

Kettner, P. M., Moroney, R. M., & Martin, L. L. (1999). Designing and managing programs: An effectiveness-based approach. Thousand Oaks, CA: Sage Publications.

Kormanik, M. B., Krieger, D. A., & Tilghman, T. E. (2000). Cross-organizational v. localized participation: A case

study on workplace diversity dialogues implementation. In K. P. Kuchinke (Ed.), Academy of Human Resource Development 2000 Conference Proceedings. Baton Rouge, LA: AHRD.

Kossek, E., & Lobel, S. (Eds.) (1996). Managing diversity: Human resource strategies for transforming the workplace. Cambridge, MA: Blackwell Publishers.

Mehrens, W. A., & Lehmann, I. J. (1991). Measurement and evaluation in education and psychology (4th ed.) Chicago, IL: Holt, Rinehart, & Winston, Inc.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). New York, NY: McGraw-Hill.

Richard, O. C. (2000). Racial diversity, business strategy, and firm performance: A resource-based view. Academy

of Management Journal, 43(2), 164-177.

Robinson, G., & Dechant, K. (1997). Building a business case for diversity. Academy of Management Executive, 11, 21-31.

Rummler, G. A., & Brache, A. P. (1995). Improving performance: How to manage the white space on the organizational chart (2nd ed.). San Francisco: Jossey-Bass.

Schlickman, J. J. (1998). ISO 9000 quality management system design : optimal design rules for documentation, implementation, and system effectiveness. Milwaukee: ASQ Quality Press.

Semler, S. (1997). Systematic agreement: A theory of organizational alignment. Human Resource Development Quarterly, 8(1), 23-40

Senge, P. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday/Currency.

Sleezer, C. M., Hough, J. B., & Gradous, D. B. (1998a). A step beyond univision evaluation: Using a systems model of performance improvement. Performance Improvement Quarterly, 12(3), 119-131.

Sleezer, C. M., & Gradous, D. B. (1998b). Measurement challenges in evaluation and performance improvement. Performance Improvement Quarterly,11(4), 62-75.

Tate, V. A. (1999, February). Marriott's diversity vision. Paper presented at the second national conference of International Quality and Productivity Center, New Orleans, LA.

Thomas, R., Jr. (1999). Diversity management: Some measurement criteria. Employment Relations Today, 25(4), 49-62.

Wentling, R. M. (2000). Evaluation of diversity initiatives in multinational corporations. In K. P. Kuchinke (Ed.), Academy of Human Resource Development 2000 Conference Proceedings. Baton Rouge, LA: AHRD.

Wheeler, M. L. (1994). Diversity training. (Research Report Number 1083-94RR). New York: The Conference Board.

Wheeler, M. L. (1996). Corporate practices in diversity measurement. (Research Report Number 1164-96RR). New York: The Conference Board.

Worthen, B. R., & Sanders, J. R. (1987). Education evaluation. New York, NY: Longman.

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