

Title: Exploring Learning Processes and Adult Professional Performance: A
Research Abstract

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Exploring Learning Processes and Adult Professional Performance: A Research

Abstract

Increasing professional performance has for a long time been a concern for adult professionals. A wide range of strategies is implemented to address performance improvement issues. Training seems to be the most common strategies through which performance improvement is pursued. Regardless of the strategy at hand, improving performance requires learning a new set of skills or changing a behavior. Therefore learning is a key element in the pursuit of higher performance.

In that sense assessing learning processes especially for adult should play an important role in understanding factors that may explain or impact adult professional performance. Assessing those learning processes for adult would require building on their rich body of experience to create knowledge as suggested by experiential learning advocates. Theories of adult learning and professional development emphasize that experiential learning may help foster professional development. Experiential learning can be defined as a knowledge creation process through which new experiences are integrated into prior experience and transformed into relevant, durable and retrievable knowledge suitable for use in the learners' environment (Kolb, 1984; Sheckley & Keeton, 1997). According to experiential learning theory (Kolb, 1984; Sheckley & Allen, 1989; Sheckley & Keeton, 1997) learning involves a constant interaction between an individual and his or her experiences and environment.

In the experiential learning process the learner becomes the key player by actively engaging in the learning process (Doebbert, 1994). Experiential learning "...promotes development by enabling a person to reduce the gap between current and potential development" (Sheckley & Allen, 1989, p. 146). Knowledge creation also requires that adults reflect on the information available to them. As Sheckley and Allen (1989) pointed out "learning involves selecting relevant information and interpreting it through one's existing knowledge" (p.11).

Based on the precedent rationale the following research questions were postulated:

- R.Q 1: what factors related to experiential learning practices do farmers engage in to increase productivity?

- R.Q 2 : What other experiential learning factors are related to farmers' productivity?

Methods

To test the precedent rationale, a random sample of 126 adult farmers was selected in the center of Senegal and was asked to report their learning practices on a questionnaire. Such learning practices once identified were then analyzed based on experiential learning principles. All farmers in the sample were male with a low level of formal education and they all grew peanut, which is the cash crop in that area. The mean age for farmers is 55 years old.

Results

A total of 96 farmers reported engaging in learning processes in response to RQ1. All the learning processes identified related in a way to experiential learning in a sense that they all put great emphasis on farmers' experiences. Further learning processes either involve hands on activities, or exchange of information whether it is active (discussions with other farmers) or passive (observation) or both. Data were coded and gathered into five major themes: (1) trial and error, (2) discussion with other farmers, (3) observation, (4) guided practice, (5) reflection on one's prior experience.

When the ways farmers engage in experiential learning are compared to farmers' level of productivity, discussion with other farmers (29.4%) appear to be the most cited way of learning reported by the high productivity farmers. Trial and error (27.4%) is the second most represented factor cited by the high productivity group of farmers. Table 1 outlines the results of this analysis.

Table 1. Learning processes factors compared to farmers' productivity

Productivity groups	Trial and error enriches learning	Discussions with other farmers enhances learning	Observation enhances learning	Guided Practice favors learning	Reflection on past experiences enhances learning	TOTAL
High Productivity (n = 51)	27.4%	29.4%	17.6%	15.6%	9.8%	51
Low Productivity (n = 45)	28.8%	15.5%	24.4%	22.2%	8.8%	45
TOTAL						96

Data analysis for RQ 2 reveals that farmers who responded could be divided into two groups based on their responses.

One group seemed to believe that they had control over the factors that might trigger learning and thus impact their productivity. They also perceived that the environment was something they could act upon and change into their advantage through a learning process in order to improve their practices. Farmers in this group referred to factors such as conventional inputs (seed, labor, fertilizer), quality of land, setting goals, problem solving and decision making skills. Farmers in this group made comments such as “I always learned from last year’s results and analyze how I used the main inputs in order to find out what needs to be changed and what needs to be reinforced” or “*setting goals is like a personal motivation for me and allows me to devote all the resources available.*” Farmers also stated that “*after each season, I gathered the people that work with me in the field and we try to analyze the problems we faced and avoid them for the next season.*” Farmers also said that “*good quality of seed, land, qualified labor and adequate farm equipment positively impact my production*” This group was named the “**internally driven**” group because of their belief that their productivity was related to factors they can act upon.

A second group was composed of farmers who believed that factors that impact their productivity were beyond their control. Farmers in this group perceived the environment as something they had no influence over and could not be changed in their favor. Farmers in this group made comments such as “*I plant seed and wait for God to provide a good production.*” Other farmers in this group said, “*Each year I just harvest what God gave me,*” or “*How much production I will have depends on God’s will, that is why I do not set goals.*” This group was named the “**externally driven**” group based on their belief that factors related to their productivity were beyond their own control such as rain, destiny etc...

Table 2: Farmers’ beliefs and productivity level

Group membership based on farmer’s beliefs	Crops	High productivity Group	Low Productivity Group	Total
Internally driven	Peanut	41(68.3%)	19 (31.6%)	60
Externally driven	Peanut	14(32.5%)	29 (67.4%)	43

Note: Percentages represent proportion over total with respect to internal vs. external factors and crop.

Peanut (n= 103)

Based on the results of this study, the following theoretical framework was developed to fully depict how learning can be related to higher performance .As revealed in Figure 1, it could be implied that experiential learning is twofold.

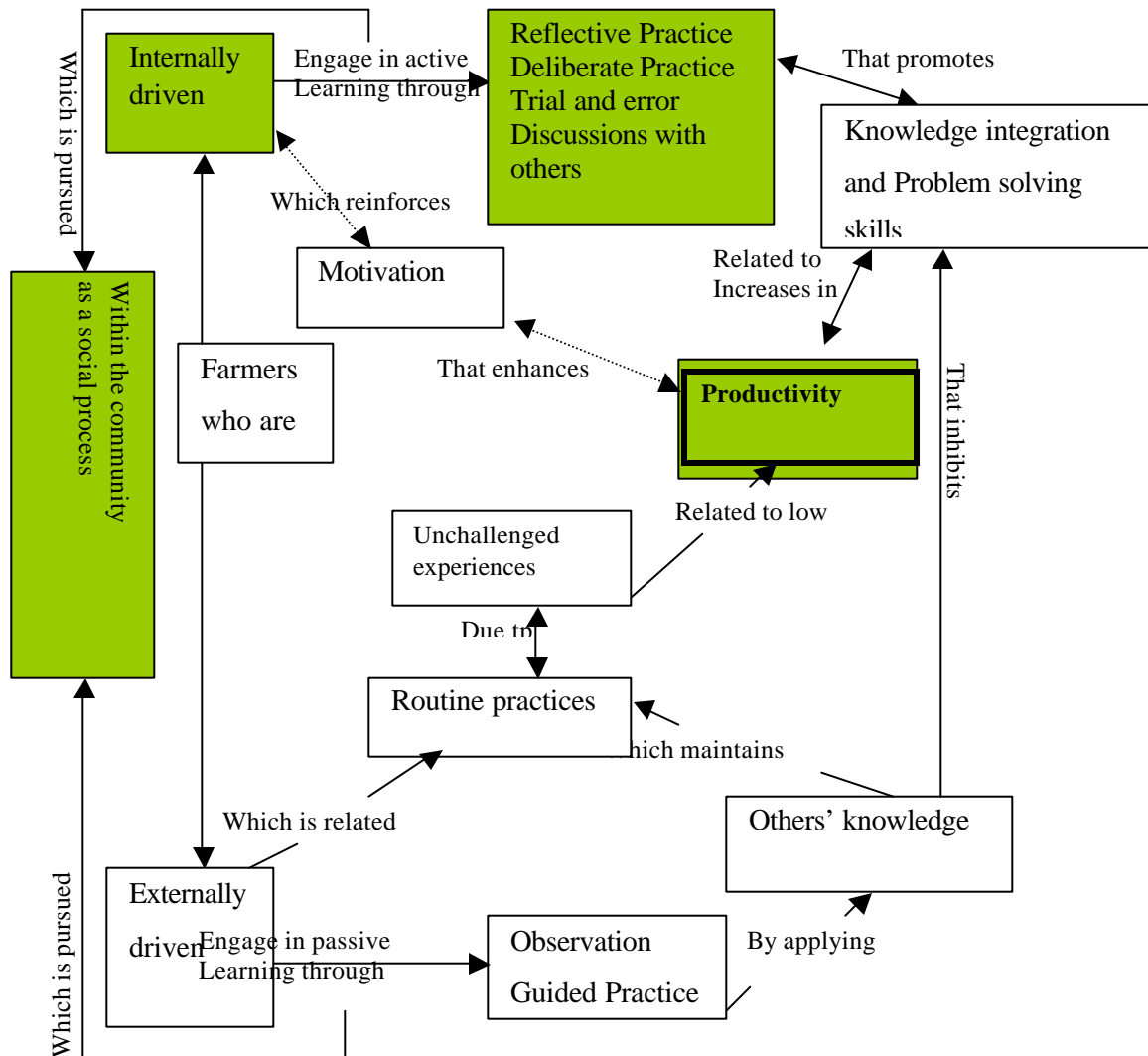


Figure 1. Proposed theoretical framework.

Engagement in experiential learning and the learning outcomes expected from it. Depend on two different but complementary factors.

1- Experiential learning is community oriented

Engagement in experiential learning in order to increase productivity requires the involvement of similar others. Interaction with other in the learning process may take different form and also have different impact on productivity. The more productive

farmers are the ones who learn new techniques through discussion with other farmers. Theories (Kolb, 1984) and research (Kitchener and King, 1990) have acknowledged learning as an active process of transformation of ideas and creation of meaning.

Experiential learning is pursued in this study, inside the community. Knowledge is created through the collaboration and involvement of similar others through discussions with elders, reflection on one's past experiences, and observation of others.

Learning is based on trust and confidence that farmers have on their colleagues and their colleagues' knowledge. Further since they have the same concerns and face the same problems, harm cannot come from other members of the community. The findings of this study can be explained in the light of the research of Diouf (1997), and Diouf, Sheckley and Kehrhahn (2000), who suggest an emphasis on learning characteristics embedded in the social community rather than an emphasis on educational level as understood in a western cultural context. Reagan (2000) investigated relevance of research based on a western cultural approach in the context of developing countries. According to Diouf (1997), "endogeneity and usefulness to the community are more determinant in valuing domains of knowledge" (p.182).

2- Individual characteristics impact and experiential learning outcomes:

Individual differences separated farmers into two groups: the internally driven farmers with higher levels of reliance on one's abilities to influence the success of their crops and the externally driven farmers with lower self-reliance on abilities to influence the success of their farms which according to them rested with forces beyond their control. Individual differences can impede or positively influence skill acquisition and performance achievement as explained in the light of social Learning Theory (Bandura, 1986; Frayne & Latham, 1987). Even though farmers did not specifically report their self-efficacy, the dynamic revealed by comparing internally versus externally driven farmers is similar to Bandura's (1993) self-efficacy or Rotter's (1973) concept of locus of control.

In sum, one can stipulate that while the social environment influences the experiential learning process, experiential learning outcomes are related to personal characteristics. From the findings of the current study impact of the learning outcomes differ based on personal characteristics. In a prior model of adult learning, Diouf (1997)

emphasizes the role of learners' characteristics as an important determinant of learning outcomes. In the current study experiential learning does not necessary lead to higher productivity for all farmers. In fact, farmers show great differences in terms of productivity derived from experiential learning due to their personal characteristics such as being internally driven as well as ability to engage in active learning.

A major implication is that adult educators and trainers have a real challenge in succeeding a correct and appropriate dosage between social contexts with individual characteristics. In other words for learning to occur in a way that would improve performance, adult education practitioners and workforce development specialists might need to develop strategies so that social environment is taken into account without inhibiting individual characteristics.

References

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Lawrence Erlbaum Associates, Inc.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewoods Cliffs, NJ: Prentice Hall

Doebbert, J. (1994). Management instruction for farm women-Learning from experience. *The Agricultural Education Magazine*, September 1994, 18-20

Diouf, W., Sheckley, B. G., & Kehrhahn, M. (2000). Adult learning in a non-western context: The influence of culture in a Senegalese farming village. Adult Education Quarterly. 51(1), 32-44.

Diouf, W. (1997). Adult Learning in a non-western context: The influence of culture in a senegalese farming village. Unpublished PhD dissertation, University of Connecticut, Storrs,Connecticut.

Frayne, C. A., & Latham, G.P. (1987). Application of social learning theory to employee self-management of attendance. Journal of Applied Psychology, 72 (3), 387-392

Kehrhahn, M. T. (1995). Transfer of customer service training: Individual perceptions of organizational support, social support, and motivation to transfer. Unpublished PhD dissertation, University of Connecticut, Storrs,Connecticut.

Kitchener, K.S., & King, P.M. (1990). The reflective judgement model: Transforming assumptions about knowing. In J.Mezirow and Associates (Eds.), Fostering critical reflection in adulthood (pp 159-176). San Francisco, CA: Jossey Bass

Kolb, D. (1984). Experiential learning. Englewood Cliffs, NJ: Prentice-Hall.
Reagan, T. G. (2000). Non-Western education traditions: Alternative approaches to educational thought and practice (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Rotter, J., B. (1973). Social learning and clinical psychology. Englewood Cliffs, NJ: Prentice Hall

Sheckley, B. G., & Keeton, M. (1997). Improving employee development. Perspectives from research and practice. Chicago,IL: Council for Adult and Experiential Learning.

Sheckley, B. G., & Keeton, M. (1997). Perspectives on how adults learn. A framework for discussing approaches to workforce development. Paper presented to CAEL Board of Trustees, San Diego, CA.

Sheckley, B. G., & Allen, G. J. (1989). Experiential learning: A key to adult development. In Lamdin, L. (Ed.), A Festschrift in Honor of Morris T. Keeton (pp.xx-xxx). Columbia, MD : Council for Adult and Experiential Learning.