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A SYSTEMATIC APPROACH TO THE DEVELOPMENT AND EVALUATION OF EXPERIENTIAL EXERCISES

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ABSTRACT

The paper describes a systematic approach to the development and evaluation of experiential pedagogies. The key notion is the need to determine the tacit knowledge required of successful people in the field. Once determined, the experiential exercise is developed to emphasize that knowledge, and the evaluation of the learning-taking place should be related to the student's change in the ability to use that knowledge. A sales prospecting example is used to illustrate the process being suggested here.

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Building upon work in Instructional Psychology, Gentry, Stoltman, and Mehlhoff (1992) proposed the use of a more systematic approach to the design and testing of an experiential exercise. To some extent, the approach is not new, as most developers of experiential exercises go through a similar approach implicitly. What Gentry, Stoltman, and Mehlhoff (1992) suggested was that the approach be made more explicit. This paper discusses an attempt to develop an experiential exercise using the proposed approach.

OVERVIEW OF THE PROPOSED PROCESS

Glaser and Bassock (1989) listed three concerns critical to the development of instructional materials: first, attention should be given to isolating and describing competent performance in terms of both knowledge and skill. Second, both design and assessment should take the learners' initial knowledge and ability into account. Third, we need to focus on the process of learning and explore how learning actually transpires. Gentry, Stoltman, and Mehlhoff (1992) also listed three somewhat similar stages involved in the design and testing of experiential exercises. We suggest that the two structures be combined to yield the four stages listed in Table 1.

The purpose of this paper is to demonstrate how this process might transpire by discussing the design and use of a particular experiential exercise. Our organization of the rest of the paper will be structured around a stage-by-stage description of the process. The specific problem area dealt with is that of sales prospecting.

TABLE 1

STAGES IN THE DESIGN AND TESTING OF EXPERIENTIAL EXERCISES

1. Develop the knowledge of what behaviors, attitudes, and cognitions are required of people entering and eventually succeeding in the field.
2. Develop experiential exercises so that students get as much preparation as is feasible.
3. Focus on the process of learning and explore how learning actually transpires.
4. Measure well whether the students have developed these behaviors, attitudes, and cognitions.

PROBLEM AREA: SALES PROSPECTING

Prospecting for new customers is important in any sales organization. This is true because it is the first step in the sales process, and the probability of success in the later stages depends to a large extent on how well the sales person has done in selecting potential clients on whom to call (Szymanski 1988). Recent research indicates that, on average, a sales call costs a firm about \$200 (Business-to-Business 1988), which appears to be ample incentive for sales managers to minimize the number of calls made on unqualified leads or low potential accounts. Managers hoping to improve prospecting performance may benefit from gaining a better understanding of how sales people make prospecting decisions. Therefore, an interactive

computer program was designed to investigate how sales people make such decisions.

The forty subjects who participated in the study were sales representatives for a medium-sized life insurance company. This industry was selected for two reasons. First, sales people in this industry have primary responsibility for making prospecting decisions. In addition, it has been shown that there can be a considerable amount of variance among salespeople in this industry in terms of their ability to perform various selling tasks.

STAGE 1: DETERMINING THE TACIT KNOWLEDGE NEEDED BY SUCCESSFUL PROFESSIONALS

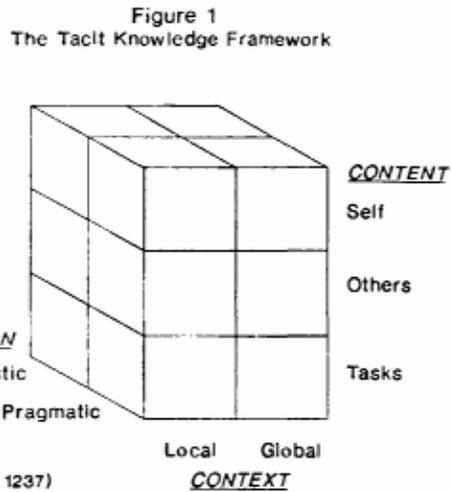
In this discussion, we focus on a subset of practical knowledge of particular importance, namely tacit knowledge. In the educational literature, there is a powerful impetus to discover the underlying aspects of intelligence, namely the lack of correspondence between performance in real-world pursuits and performance in school that is widely reported. In Neisser's (1976) view, this situation exists because formal education tends to cover only a subset of what is required in the real world. Performance and pedagogy in education systems tend to reflect what he labeled academic intelligence, which differs from the intelligence required for performance in natural settings. While experiential pedagogy represents movement in the right direction on a theoretical level, absent a formal appraisal of the relevant tasks, which students are expected to perform with competence, problems in bridging the gap between real world and academic performances should be expected. Moreover, we assert that attempts to identify the basic processes and foci of experiential learning will continue to be thwarted until significant attention is given to the facets of practical intelligence.

Though it is generally the case that the specific aspects of practical intelligence have not yet been identified, and the they will need to be developed on a case- or context-specific basis, conceptual guidance is provided by Wagner and Sternberg (Sternberg 1986; Wagner 1987; Wagner and Sternberg 1985, 1987). They define tacit knowledge as that which is not typically expressed or stated openly, not directly taught, or spoken about. It can be taught, but the 'stuff' is typically disorganized, informal, and relatively inaccessible, making it ill-suited for conventional methods of formal instruction. The key is not that it can't be taught or spoken, but that for the most part, it is not taught or spoken.

There are three dimensions of tacit knowledge, and each dimension can be further delineated as shown in Figure 1. The content of tacit knowledge can pertain to managing oneself, others, or tasks. The contextual representation in tacit knowledge is either local (short-range, self-contained), or global (long-range, big picture). The orientation aspect of knowledge (representing both a behavioral and a motivational force) can be either idealistic or pragmatic. These facets of tacit knowledge have been tested and empirically separated from other identifiable aspects of knowledge (see Wagner 1987). Though largely confined to interpersonal skills and abilities, the distinction seems generally justified. Further efforts are needed to determine the extent to which these distinctions hold in other areas of competence.

As to the use of experiential learning to provide this practical knowledge, Wagner and Sternberg (1987) comment that many experiential devices are not simulations of real-world tasks. Commenting specifically on the use of the "in-basket exercise to develop and test applied understanding, they offer the challenge which many ABSEL members (should) have experienced: This approach has considerable face validity (i.e., performance by the test is similar in appearance to the criterion performance), but it can be difficult to decide which aspects of a job to simulate and what standards to use in evaluating performance in the simulation (p. 438).

Developments In Business Simulation & Experiential Exercises, Volume 20, 1993



Measurement of Tacit Knowledge

To apply the concept of tacit knowledge, we must begin by isolating the types of knowledge acquired and actually applied in real-world settings. As indicated above, we chose a narrow domain in which to investigate that knowledge. Rather than to consider the many facets of personal selling, we considered only the prospecting stage. Further, the task investigated was a somewhat novel presentation of sales leads, as it resembled the information display board format (most commonly seen in Consumer Reports' comparisons of products across attributes). We acknowledge that this format is not the traditional manner in which insurance sales people receive sales leads, which is on a one-at-a-time basis. However, such formats are becoming increasingly common in the insurance industry as computerized data bases are used to centralize the early phases of the prospecting stage. In fact, one regional office of the firm under study did not participate in the study because they were already using such a computerized presentation of prospects, and thus their sales people had already acclimated to the type of stimulus used in the study (thus introducing an experience factor which had not been anticipated).

The study involved 40 salespeople, split into higher performers and lower performers based on expertise in prospecting. The performance criterion was a linear combination of subjective ratings of prospecting ability by sales managers and of objective measures such as the number of new life insurance policies sold and the total dollar amount of new life insurance sold in the prior calendar year. The details of the study can be found in Macintosh (1992).

Each subject was presented with a computerized format listing 12 prospects and eight attributes (income, age, occupation, etc.). They were told to rate each prospect and half were instructed to choose the best prospect. The Macintosh laptop was programmed (using Hypercard) so that the sales person had to click the mouse when it was pointing at a specific cell in order to observe the attribute value for a particular prospect. The program recorded the sequence of information acquisition. In addition, the sales people were asked to provide verbal protocols (to think out loud) as they went through the process. The sales people later gave their ratings or choices using pencil and paper measures. Finally, the sales people in the judgment (rating) task were asked to choose their best prospect.

The use of the computerized format allowed the measurement of both process and outcome. The results indicated that differences existed between higher and lower performing sales people. For example, for the sales people in the rating task, the evaluations were regressed against the attribute values, which yielded evidence that several attributes were weighted differently by higher performing sales people and lower performing sales people. More specifically, the study indicated that higher performing sales people put greater weight on the prospect's income, occupation, and age, while lower performance put more emphasis on the number of goals and the number of children that the prospect had. This result suggested that lower performers had a narrower definition of the need for insurance, as compared to higher performers who had a broader definition that included needs related to higher income.

An interesting interaction was found when the final 8 of 10 choices were investigated. When the sales people in the choice task were investigated, the majority selected either prospect 2 or prospect 7 (8 of 10 for high performers, 9 of 10 for low performers). However, when the choices were investigated for the sales people who first were asked to rate each prospect, a different pattern was found. For the higher performers, the majority (7 of 10) again selected prospect 2 or prospect 7; for the lower performers, only 4 of 10 selected either of those two prospects. We interpret these results as providing evidence that lower performers face more problems with information overload. The judgment task required that sales people investigate far more attributes per prospect; apparently the higher performers were able to sift through the information in order to select the best prospects, while the lower performers were more prone to get lost in the noise of the process.

Thus, the study provided insight into the tacit knowledge needed by higher performers in terms of attributes to weight heavily and in terms of how to avoid problems of information overload.

STAGE 2: DEVELOPMENT OF AN EXPERIENTIAL EXERCISE

The same format used to measure sales people's tacit knowledge of prospecting was used as an experiential exercise with sales management students. The cover story was in essence the truth: the computerized format was developed as a training exercise for an insurance company and was based on information commonly available to sales people.

The primary benefits of using the same program are that it allows the labeling of "optimal" selections (prospects 2 or 7) and that the protocols provide a rich basis for insight into the thought processes of the successful performers undergoing the same task.

STAGE 3: FOCUS ON THE PROCESS OF LEARNING

Students without insurance sales experience will have a limited perspective as to what constitutes a *good prospect. Using the format to experiment and investigate possibilities is enjoyable for the students, but there is also some frustration once they realize that their intuition as to who is likely to buy insurance may not have any validity, material on prospecting for insurance clients was made available in the form of demographic profiles and discussions of both the needs and financial capacities of past buyers. The students are allowed to retry the exercise once their picture of a good prospect has been filled in somewhat.

Feedback in the form of a summary of the process used to search for information about prospects was given to the students, along with comparable figures obtained from the higher performing sales people. Not only did they receive output in terms of the optimal clients, but also feedback about the cues that should be weighted most strongly. The feedback was provided after they had turned in a short summary paper giving their recommended choices and a discussion of the process that one should use to determine the choices.

The student's explicit self-assessment of what was learned was sought in the debriefing sessions following the use of the exercise. As Lederman (1992, p. 146) notes, Most simply stated, debriefing is a process in which people who have had an experience are led through a purposive discussion of that experience. The students' directed reflections on the experience can raise a number of issues:

- what attributes are most useful in evaluating prospects;
- the need to use marketing research in order to identify better profiles of good prospects;
- the tendency for some students to seek "similar" prospects (i.e., the younger prospects);
- the fact that the most *similar prospects may not be the best* prospects;
- the tradeoff between sales potential and perceived accessibility;
- the frustration that certain information on prospects was not available;
- that different types of processing take place when they are asked to rate all prospects as opposed to choosing one;
- the screening process used to eliminate the majority of the prospects

Developments In Business Simulation & Experiential Exercises, Volume 20, 1993

from consideration; and
--the possible dangers of using such an information base in prospecting.

STAGE 4: THE MEASUREMENT OF WHAT IS LEARNED

The specific domain of concern here is sales prospecting, although the variety of issues arising in the debriefing session (as listed above) indicates that learning will occur in other domains as well. The use of the exercise allows detailed feedback about the process undertaken during the exercise, and not just outcome feedback. Further, they are given feedback as to the processes used by successful sales people in the same task. Contrasting the process used with that of high performers provides a *vivid* portrayal of the type of tacit knowledge held by successful sales people. Further example protocols from the data collection in Stage I can be provided during the debriefing session so that a clearer picture of the needed tacit knowledge can be obtained.

SUMMARY

This paper discusses a systematic approach to the design and testing of experiential exercises, using an information display format in a sales prospecting task as the context. The key addition to the usual approach is the overt attempt to measure the tacit knowledge held by successful professionals and then to structure the exercise so that students learn similar processes.

The use of the four stages advocated here may well have some very positive implications for a closer integration of teaching and research. If one's research investigates the processes used by successful practitioners, one can blend the findings into structured education experiences that provide students exposure to the tacit knowledge needed in the profession.

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