IMPROVING FIELD EDUCATION THROUGH KOLB LEARNING THEORY

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This article explores ways that application of David Kolb's learning style model can improve the quality of field education. It first explains Kolb's theories concerning preferred learning styles, the need to complete four learning stages in sequence (concrete experience, reflective observation, abstract conceptualization, and active experimentation), and combinations of preferred learning styles in quadrants. It then reports on the authors' research involving 45 students and 40 field supervisors at the University of Minnesota, Duluth, in 1995–96. Findings about the preferred learning styles of students and supervisors, along with variables that affect learning styles and student satisfaction with the field experience, have already improved student-supervisor relationships locally and have implications for social work field programs elsewhere.

The value of field education has been recognized since social work education became a formal academic discipline early in this century. Historically, field education has allowed students to "learn by doing," with the community serving as the laboratory for applying knowledge and skills acquired in the classroom. In such practical applications, students are not the only ones molded by the educational process. Students, supervisors, other agency staff, and clients interact in a multidirectional field of determining forces affecting all parties involved.

One major determinant of student learning is the quality of the educational supervision provided by the agency supervisor. The supervisor must assess the student's knowledge, values and skill levels, and developmental maturity, and then design learning assignments appropriate to the student's field placement goals. Because each student progresses differently in these areas, "one size fits all" educational supervision is not appropriate.

The authors have observed that agency supervisors frequently have difficulty assessing how best to provide educational supervision. As research results here demonstrate, application of the Kolb Learn-
ing Style Inventory has been found useful for assisting the agency supervisor and the student to assess their respective learning styles and for helping the supervisor adjust to the student's style.

The Kolb Model

David Kolb's learning theory is based on preferred learning styles and stages. Kolb also developed a widely used and simply administered 12-question questionnaire to measure individuals' learning styles. The four primary dimensions of his model are: (a) Concrete Experience, or learning through "experience"; (b) Reflective Observation, or learning through "examining"; (c) Abstract Conceptualization, or learning through "explaining"; and (d) Active Experimentation, or learning through "applying" (Kolb, 1984; Smith & Kolb, 1986; Svinicki & Dixon, 1987). These four dimensions are also paired in two continua: Concrete Experience versus Abstract Conceptualization and Reflective Observation versus Active Experimentation. The latter pair primarily reflects the difference between inductive and deductive learning.

For a complete learning experience to take place, Kolb says students must complete all four of the learning stages. This does not happen automatically. Although everyone utilizes each of the four learning styles to some extent, he asserts that each individual has a preferred learning style—centered on "intuition" (through Concrete Experience), "reflection" (through Reflective Observation), "theorizing" (through Abstract Conceptualization), or "doing" (through Active Experimentation) (Smith & Kolb, 1986). The danger in teaching this theory is that students lock into their preferred style and in the process do not complete the other three types of learning. For example, a student with strengths in concrete, experiential learning might not—without active supervisory encouragement—move beyond that dimension into the other parts of the learning cycle.

Kolb further suggests (Smith & Kolb, 1986) that students should go through the cycle in a sequence beginning with Concrete Experience, moving to Reflective Observation, then to Abstract Conceptualization, and finally to Active Experimentation (see Figure 1). Although

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**Figure 1. Kolb Learning Cycle**

![Kolb Learning Cycle Diagram](image-url)
we agree with the sequence in Kolb's model, we do not believe that all students must begin with Concrete Experience. Instead, we strongly recommend that field supervisors first tap into an individual student's preferred learning style. This often involves respecting the difference between inductive and deductive orientations. Students with the former do well beginning with Concrete Experience, but students with the latter might benefit from starting with Abstract Conceptualization. (See Van Soest and Kruzich, 1994, for a similar view.)

Learning approaches with these opposite starting points can found in teaching interviewing skills. Inductive students could initially participate in interviews (a Concrete Experience), and then be asked to reflect (Reflective Observation) on the experience and its objective and subjective components. Formulating conclusions or generalizations (Abstract Conceptualization) on interviewing follows, using perhaps a cause-and-effect conceptual model. Finally, the students could try out their ideas of good interviewing skills (Active Experimentation). This process would push them to experience new modes of learning.

A deductive learning cycle might begin with a conceptual discussion of the components of effective interviewing (Abstract Conceptualization), then proceed to: creatively applying these principles to various case situations (Active Experimentation); personally conducting client interviews (Concrete Experience); and, finally, reflecting on the experiences (Reflective Observation). In this process, students would ideally integrate theory with practice (Kolb, 1984; Smith & Kolb, 1986; Svinicki & Dixon, 1987).

Kolb (1984) and others have also developed a conceptual framework and conducted research using four combinations of the above learning style dimensions. As will be described, learning style combinations, or quadrants, are important conceptual descriptions, and are used to combine data for statistical analyses. The four quadrants are:

- **Accommodator**—combines active experimentation and concrete experience. Accommodators tend to be people-oriented and learn through trial-and-error problem solving.
- **Diverger**—combines concrete experience and reflective observation. Divers tend to use information from their senses and feelings.
- **Assimilator**—combines reflective observation and abstract conceptualization. Assimilators are characterized by abstract thinking and a theoretical orientation.
- **Converger**—combines abstract conceptualization and active experimentation. Convergers tend to have a good understanding of practical ideas and their application.

These quadrants enable the researcher to combine an individual's four separate dimension scores into one composite (quadrant) classification (see Figure 2). This is done by comparing a person's scores on the different axes: Active Experimentation versus Reflective Observation and Concrete Experience versus Abstract Conceptualization. By plotting the two axis points as if on a Cartesian grid, researchers thus place individuals at discrete points in one of the four learning style quadrants (see Figure 2). For example, someone with higher Active Experimentation than Reflective Observation scores, and higher Concrete Experience than Abstract Conceptualization scores, would be classified as an Accommodator.

**Literature Review**

There have been many studies of the components of effective agency supervi-
sion of social work field students (e.g., Ellison, 1994; Fortune & Abramson, 1993; Kissman & Van Tran, 1990; Knight, 1996; Rogers & McDonald, 1995; Shulman, 1982; Vonk, Zucrow, & Thyer, 1996). Only two, however, have specifically used Kolb learning style concepts and measurements to describe and assess field placements.

Kruzich, Friesen, and Van Soest (1986) found that both students and agency supervisors scored highest in Concrete Experience, whereas faculty scored highest in Abstract Conceptualization. BSW students tended to be Accommodators, and agency supervisors and MSW students, Divergers. Furthermore, older students (with median ages greater than 28) were more likely to be Divergers, while younger students (age 28 or less) spread out among the other three categories.

Van Soest and Kruzich (1994) undertook the second application of Kolb’s framework to assess field education. They found that Concrete Experience was the most frequently preferred learning style of students and agency supervisors. Furthermore, the greater the difference between the supervisors’ and students’ Concrete Experience scores, the lower the students assessed the supervisors’ ability to form a relationship with the student. Similarly, the greater the difference in scores between the two groups on Abstract Conceptualization, the greater the student perception of dissimilarities between them. Finally, no relationship between preferred learning styles and learning outcomes in field was found. Van Soest and Kruzich thus did not conclude that educators should strive to match the learning styles of supervisors and students. Rather, they asserted that supervisors should adapt their supervisory teaching style to the preferred learning styles of students.

Two recent articles using Kolb principles to assess nursing education are also relevant to social work field education. Laschinger and Boss (1984) found that the majority of incoming and advanced nursing students preferred the concrete learning style, and that there was a greater incidence of the concrete style in the advanced students than in incoming students. In 1995, Cavanagh, Hogan, and Ramgopal found that the majority of nursing students (54%) had a predominantly concrete learning style and
that gender, age, and educational level did not much affect learning styles. Both studies indicated that many nursing students were not oriented toward theoretical learning.

Context of the Current Study

Our research was initiated with the long-range objective of using Kolb’s concepts to formulate specific teaching techniques through which agency field supervisors could effectively “match” their supervisory styles with the learning styles of their students. This article reflects some of the progress we have made toward achieving this goal. Most significantly, we have begun to help individual field instructors and students identify their respective learning styles; the instructors are recognizing the importance of starting the four-step learning cycle with the predominant learning style of the student. We have also started to systematically analyze aggregate data about the learning styles of field supervisors and students to identify possible variables in their learning styles. Such variables are especially relevant to orienting supervisor training toward the combinations of student–supervisor learning styles that occur most frequently. For example, if a program could predict that in the near future most students and most field supervisors would be Accommodators, educators could focus on specific field teaching techniques and tasks that work best with two Accommodators.

Data, Research Questions, and Hypotheses

The following descriptive data were collected:

- The scores of students and supervisors on the four learning style dimensions and the learning style continua. These were compared with national norms for adults with an average education of 2 years of college (Smith & Kolb, 1986).
- The proportions of students and of supervisors who were (a) more concrete than abstract and (b) more active than reflective in their learning styles.
- Students’ and supervisors’ primary learning style quadrants. These data were also compared with those of comparable studies (Kolb, 1981; Middleman & Rhodes, 1985; Van Soest & Kruzich, 1994).
- Percentages with which different combinations of student–supervisor learning styles occurred.

The following research questions and hypotheses were addressed:

- What is the relationship between students’ predominant learning style and both (a) their past professional work experience and (b) their having a BSW degree?

The hypotheses were that: (a) students with 1 or more years of pre-MSW human service work experience will favor Concrete Experience over Abstract Conceptualization more than students with less than 1 year of such experience; (b) students with 1 or more years of such experience will favor Active Experimentation over Reflective Observation more than students with less experience; (c) students with BSWs will favor Abstract Conceptualization over Concrete Experience; and (d) students with BSWs will favor Reflective Observation over Active Experimentation.

- What is the relationship between students’ predominant learning style and their overall satisfaction with their learning experience in the field placements?

The hypotheses were that: (a) students favoring Concrete Experience over Abstract Conceptualization will rate their overall field learning experience higher; (b) students favoring Active
Experimentation over Reflective Observation will rate their overall field learning experience higher, and (c) students in the Accommodator quadrant (who favor Concrete Experience and Active Experimentation) will rate their overall field learning experience higher than those in other quadrants.¹

- What is the relationship between differences in students' and supervisors' predominant learning styles and students' overall satisfaction with their learning experience in the field placements?

The hypotheses were that: (a) students whose learning style quadrant matches their agency field supervisor's will rate their overall placement learning experience higher than other students; (b) students whose Abstract Conceptualization minus Concrete Experience (AC - CE) scores are less highly correlated with their agency field supervisor's AC - CE scores will rate their overall placement learning experience lower than students whose AC - CE scores are more highly correlated with those of their agency field supervisor; and (c) students whose Active Experimentation minus Reflective Observation (AE - RO) scores are less highly correlated with their agency field supervisor's AE - RO scores will rate their overall placement learning experience lower than students whose AE - RO scores are more highly correlated with those of their agency field supervisor.

Measurements

Kolb's four learning style dimensions—Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation—were all measured on an internal level on the basis of participants' scores on the Kolb Learning Style Inventory. Scores on each dimension could range from 12 to 48.² Participants' scores on the continuum between Abstract Conceptualization and Concrete Experience were obtained by subtracting their scores on the second dimension from their scores on the first. The same was true for participants' scores on the Active Experimentation—Reflective Observation continuum. In both cases, scores could range from −36 to +36.

Internal reliability of all six of the above variables has been assessed through Cronbach's α (n = 268) to be quite high: .82 for Concrete Experience, .73 for Reflective Observation, .83 for Abstract Conceptualization, .78 for Active Experimentation, .88 for AC - CE, and .81 for AE - RO (Smith & Kolb, 1986). Some researchers have questioned the predictive validity of Kolb's inventory, arguing, for instance, that scores may be influenced by individuals' attitudes toward what they are currently learning, as well as by their learning histories (Cavanagh, Hogan, & Rangopal, 1995). Several studies, however, have supported the inventory's predictive validity in various ways; for example, Kolb's learning preferences helped to predict the kind of graduate programs students enter as well as their ultimate career choices (Jonassen & Grabowski, 1993; Kolb, 1984).

¹ We initially planned to formulate hypotheses with the same independent variables as the three above, but with a dependent variable reflecting field supervisors' final overall evaluations of students' performance. This proved to be unrealistic, because nearly all students received a "4" or "5" on a 5-point scale.

² The inventory has 12 questions, each asking respondents to rank on a scale of 1–4 which of four descriptors describes their learning style. A "4" reflects the most accurate descriptor and a "1" the least accurate. For instance, one question asks respondents to rank the following statements according to how accurately each describes how they best learn: "I trust my hunches"; "I listen and watch carefully"; "I rely on logical thinking"; and "I work hard to get things done."
An individual's assignment to one of the four learning style quadrants—Accommodator, Assimilator, Diverger, or Converger—represents nominal measurement. This assignment is determined by establishing a person's AC/CE score on a vertical, or y, axis, and by establishing the AE/RO score on a horizontal, or x, axis.

Each student's rating of the overall field learning experience represents an interval level composite of responses to the questions: (a) What is your degree of satisfaction with your supervisor's teaching/learning style? (b) What is your opinion about how much you learned from your supervisor? and (c) To what degree did your experience in the field program assist you in attaining your personal learning goals? Each question was answered on a 5-point scale, with 1 being least satisfied and 5 being most satisfied. Scores could range from 3 to 15.

We initially gathered ratio-scale data in measuring students' pre-MSW human service work experience. For the sake of analysis, however, we dichotomized this data into two (nominal) categories based on whether or not a student had one or more years of such experience. This was done partly because of the skewed distribution of this variable when measured on a ratio scale. Many of the students in our sample (11 of 45) had had less than a year of such experience, but a significant number (5) had had 10-20 years of such experience. Instead of treating work experience as a ratio-scale variable, we decided that distinguishing between the two categories has more relevant implications for program planning. Our hypotheses and measurement procedures reflect this concern for relevance.

Whether or not a student entered our program with a BSW is also a nominal measurement.

Administration

At the beginning of the 1995-96 academic year, the authors introduced the Kolb Learning Style to all MSW students enrolled in our concurrent field placements. In field seminars, students took the Learning Inventory and, with our help, compiled their scores; this oriented them to the basic concepts behind Kolb's theory and helped them to interpret their inventory scores. Simultaneously we mailed inventories to each of our agency field supervisors, explaining in several sentences the research and the importance of learning style theory for effective field teaching. We asked the students to explain the inventory and the theory behind it to their agency field supervisors, feeling that this would increase their ownership in the project. After 3 weeks, field supervisors who had not yet returned their inventories were sent a postcard reminder. There was another reminder when the three of us, as faculty field liaisons, met with all supervisors for students' midterm evaluations. These evaluations also provided an opportunity to formally survey supervisors about the project and to answer their questions about it. Their main feedback was that they needed more orientation about the inventory and the implications of scores which they and their students had received. We had a remarkably high response rate, given that participation was voluntary: 45 out of 46 students and 35 of the 39 agency field supervisors completed inventories.3

3 Note that the 35 supervisor respondents supervised 40 students. Since we were primarily interested in the teaching/learning interactions between individual students and their supervisors, the learning style profiles of each of the five supervisors who had two students were included twice in our analysis. This left us with a working sample of 40 supervisors.
Results

Descriptive Analyses

Table 1 shows the mean scores and standard deviations of students’ and agency field supervisors’ learning style scores, as well as national norms. Five of the eight mean scores from our two groups were more than one standard deviation (SD) from the national norms (measured using the SD of the national norm): both groups’ Reflective Observation scores; both groups’ Abstract Conceptualization scores; and agency supervisors’ Active Experimentation scores. Contrary to one of our hypotheses about students, both students’ and supervisors’ AC – CE scores were more Concrete than Abstract (as indicated by their negative numbers), whereas the national norm was more Abstract.

Table 2 lists the percentages of students, field supervisors, and members of a normative sample who were more Concrete than Abstract and more Active than Reflective. The national norms were based on a sample of 76 individuals with college educations (described in Smith and Kolb, 1986). Two traits stand out in this table: first, a greater percentage of students than field supervisors were primarily Abstract (versus Concrete) learners and primarily Reflective (versus Active) learners; second, neither the students nor the field supervisors were as Reflective as the national sample of college-educated individuals. None of these differences, however, were statistically significant at the .05 level when evaluated through chi-squared tests.

Table 3 shows the distribution of both students and agency field supervisors by their primary learning style quadrant. As in other studies (Kolb, 1981; Middleman & Rhodes, 1985; Van Soest & Kruzich, 1994), more individuals in both groups appeared in the Accommodators quadrant (that is, they were more Concrete than Abstract and more Active than Reflective) than in any other quadrant.

Table 2. Primary Learning Styles for Students, Field Supervisors, and a Normative Sample

<table>
<thead>
<tr>
<th>Group</th>
<th>Concrete vs. Abstract</th>
<th>Concrete vs. Reflective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students (n=45)</td>
<td>54%/46%</td>
<td>69%/31%</td>
</tr>
<tr>
<td>Field Supervisors (n=40)</td>
<td>64%/36%</td>
<td>74%/26%</td>
</tr>
<tr>
<td>National Norms (n=76)</td>
<td>64%/36%</td>
<td>63%/37%</td>
</tr>
</tbody>
</table>

* This sample of college-educated individuals is described in Smith and Kolb (1986, p. 76).

Table 1. Students’, Agency Field Supervisors’, and a Normative Sample’s Mean Scores and Standard Deviations on Kolb Learning Style Dimensions

<table>
<thead>
<tr>
<th></th>
<th>Students (n=45) Mean/SD</th>
<th>Supervisors (n=40) Mean/SD</th>
<th>National Norms (n=1,446) Mean/SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Experience (CE)</td>
<td>25.49 (6.4)</td>
<td>27.03 (5.9)</td>
<td>26.00 (6.8)</td>
</tr>
<tr>
<td>Reflective Observation (RO)</td>
<td>22.80 (6.1)</td>
<td>21.83 (6.7)</td>
<td>29.94 (6.5)</td>
</tr>
<tr>
<td>Abstract Conceptualization (AC)</td>
<td>23.56 (5.3)</td>
<td>22.75 (7.2)</td>
<td>30.28 (6.7)</td>
</tr>
<tr>
<td>Active Experimentation (AE)</td>
<td>28.89 (5.8)</td>
<td>28.68 (6.1)</td>
<td>35.37 (6.9)</td>
</tr>
<tr>
<td>AG – CE</td>
<td>-1.93 (9.5)</td>
<td>-4.28 (11.9)</td>
<td>4.28 (11.4)</td>
</tr>
<tr>
<td>AE – RO</td>
<td>6.09 (9.6)</td>
<td>6.85 (10.8)</td>
<td>5.45 (11.0)</td>
</tr>
</tbody>
</table>

* This sample of adults with an average education of 2 years of college is described in Smith and Kolb (1986, p. 75).
Table 4 shows various combinations of student-supervisor predominant learning styles. Note that the Accommodator-Accommodator combination characterized almost one fifth of all student-supervisor dyads, and that the largest four combinations (including Accommodator-Accommodator) together comprised exactly one half. Among the 40 student-supervisor dyads (including 14 not shown in this table), 13 had the same learning style.

Explanatory Analyses

The first hypothesis tested was that students with 1 or more years of pre-MSW, professional work experience would favor Concrete over Abstract learning styles more than those with less than 1 year of experience. It was supported at the .05 level through an independent sample t test (t[43]=1.87, p=.03, one-tailed). These more experienced students were not, however, necessarily stronger in Active Experimentation than Reflective Observation (t[43]=1.00, p=.16, one-tailed).

Independent sample t tests were also used to evaluate the next two hypotheses concerning students with BSWs (that they will favor Abstract Conceptualization over Concrete Experience and Reflective Observation over Active Experimentation). The relationship between variables was not found to be statistically significant on students’ scores on either the Abstract versus Concrete or the Reflective versus Active continua (respectively: t[43]=.85, p=.20, one-tailed; t[43]=-5.0, p=.31, one-tailed).

The Pearson’s correlation coefficient (Pearson’s r) did not support statistically significant correlations between (a) students’ scores along the Concrete Experience–Abstract Conceptualization learning continuum and their overall ratings of their field learning experience (r=.009, p=.28, one-tailed), or (b) students’ scores along the Active Experimentation–Reflective Observation continuum and their overall ratings of their field learning experience (r=.005, p=.33, one-tailed). Contrary to expectation, the mean overall

<table>
<thead>
<tr>
<th>Quadrant</th>
<th>Students</th>
<th>Agency Field Supervisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodator</td>
<td>17 (38%)</td>
<td>19 (48%)</td>
</tr>
<tr>
<td>Assimilator</td>
<td>8 (18%)</td>
<td>4 (10%)</td>
</tr>
<tr>
<td>Converger</td>
<td>11 (24%)</td>
<td>9 (22%)</td>
</tr>
<tr>
<td>Diverger</td>
<td>2 (4%)</td>
<td>4 (10%)</td>
</tr>
<tr>
<td>Accommodator/Divergera</td>
<td>4 (9%)</td>
<td>3 (8%)</td>
</tr>
<tr>
<td>Converger/Assimilatora</td>
<td>3 (7%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Totals</td>
<td>45</td>
<td>40</td>
</tr>
</tbody>
</table>

Scores were exactly equidistant between the two categories.

4 Before conducting this statistical test and all that follow, we assessed the distribution normality of all interval level variables through the Lilliefors’ test (Norusis/SPSS Inc., 1993). These interval level variables were: (a) students’ scores along the Concrete Experience–Abstract Conceptualization continuum; (b) students’ scores along the Active Experimentation–Reflective Observation continuum; and (c) students’ overall ratings of their field learning experiences. In all three cases, the hypothesis of normality could not be rejected at the .05 level.

Table 4. Frequency of Combinations of Student–Supervisor Learning Styles

<table>
<thead>
<tr>
<th>Combination</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodator–Accommodator</td>
<td>7 (18%)</td>
</tr>
<tr>
<td>Converger–Accommodator</td>
<td>5 (13%)</td>
</tr>
<tr>
<td>Converger–Converger</td>
<td>4 (10%)</td>
</tr>
<tr>
<td>Assimilator–Accommodator</td>
<td>4 (10%)</td>
</tr>
<tr>
<td>Accommodator–Converger</td>
<td>3 (8%)</td>
</tr>
<tr>
<td>Accommodator–Diverger</td>
<td>3 (8%)</td>
</tr>
</tbody>
</table>
satisfaction score of students in the Accommodator quadrant was lower than the mean for students in other quadrants (11.75 versus 12.80, with 15 points possible), though the differences were not statistically significant at the .05 level as assessed through independent sample t tests (t[39] = -1.58, p = .06, one-tailed).

Concerning the final group of hypotheses, an independent sample t test showed the lack of a statistically significant relationship between matches in student-supervisor learning style quadrants and students’ overall rating of their field learning experience (t[36] = -1.17, p = .23, one-tailed). There also was no statistically significant correlation between the amount that students and field supervisors varied on their AC – CE scores and students’ ratings of their overall field learning experience as assessed through Pearson’s correlation coefficient (r = .005, p = .838, one-tailed). There was, however, a statistically significant relationship between how closely students’ and supervisors’ AE – RO scores matched one another and students’ ratings of their overall field learning experience (r = .0094, p = .831, one-tailed).

Discussion

We have found Kolb’s conceptual model and his Learning Style Inventory to be useful tools for optimizing the relationship between our agency field supervisors and their students. These tools have enabled both groups to view learning as a four-step process that involves experiencing, reflecting, conceptualizing, and creatively experimenting. Equally important, supervisors have begun to conceptualize the particular learning strengths of individual students and to match specific teaching styles with these strengths.

A number of the descriptive findings of this study are potentially significant for improving our field program and may be generalizable to other programs. For example, agency field supervisors favored Reflective Observation less than field students, and both groups favored it less than national norms. Also, among both students and field supervisors, Accommodators (who by definition de-emphasize abstract and reflective learning) outnumber those in the other learning style quadrants. Together, these two findings suggest the need to provide specific training to agency supervisors on conceptual and, especially, reflective teaching techniques. Supervisors might, for example, help students assess their field experiences in light of theoretical concepts they have learned in class.

The two hypotheses that were supported in the study are also potentially useful for improving field education. The first of these was that students with greater pre-MSW human service work experience were more concrete than abstract. A possible application of this finding would be to orient field supervisors’ training according to trends in students’ pre-MSW professional work experience—for instance, placing more emphasis on training supervisors to use concrete teaching techniques when incoming students have greater professional work experience. This is consistent with our premise that the most important part of utilizing the Kolb learning cycle is to start with the student’s predominant learning style before moving through the rest of the circle.

The second hypothesis that received support was that students whose learning styles were more similar to their field supervisors along the Active Experimentation–Reflective Observation continuum would rate their field experience higher. Field programs could use this knowledge to sensitize supervisors to the importance of trying to “match” their teaching techniques to their student’s degree of experiential (versus reflective) thinking and learning. Again, this is most relevant at
the beginning point of the four-step learning cycle. As with our descriptive research questions, we hope that other researchers will replicate our work to evaluate its generalizability.

A vital part of this project has been using our knowledge of the Kolb model and the results of our research to specifically educate both our agency field supervisors and our students about how to improve the quality of field teaching and learning. One way we have done this is through formal workshop training for field supervisors. With students, our regular field seminars have been used for the same purpose (one of our required seminar readings is Svinicki & Dixon, 1987). We have also required that each field supervisor-student pair formally discuss their respective learning styles and the implications for their relationship. This has been accomplished by making such dialogue a part of our students’ Field Learning Contract.

In view of students’ apparent need for greater abstract conceptualization and reflective observation, we have restructured our field seminars to emphasize the integration of theory with field practice. For instance, we have added assignments that require students to read short theoretical articles and then relate their field experiences to these articles. This has been difficult for many of our Accommodator students, who are accustomed to talking about their field experiences concretely. We are still experimenting with different ways of helping these students better integrate theory and practice, among them requiring that one section of students’ ongoing field journals be devoted to such integration.

In helping students become more reflective and conceptually oriented in field seminars, the three of us have had to remain aware of our tendencies, as academicians, toward excessively abstract and reflective styles. Although students do need adequate exposure to abstract and reflective thinking and learning, we must initially connect with Accommodator students’ concrete and experiential strengths.

Perhaps our greatest accomplishment to this point has been creating—in both students and field supervisors—a heightened awareness of learning style theory and its relevance to field education. The degree of change within the past year has surprised even us. When we initiated our research project, there was some resistance among students and field supervisors to the idea of applying Kolb’s concepts to field education. This resistance was partly due to the misconception, since clarified, that some learning styles are inherently inferior to others. We find this year that both groups are starting to frame their discussions in terms of their respective learning styles. For example, some students tell us that they are “active experimenters,” who benefit by “jumping right into” challenging field experiences (with supervisory guidance), and reflecting afterwards, rather than spending lots of front-end time in theoretically oriented discussions. Others, meanwhile, say that they need to spend time observing and reflecting before entering into complex tasks.

We are gradually working on providing field supervisors with specific suggestions on how to teach given skills that utilize each of the four learning stages. This is a great challenge. Given the current state of professional knowledge, we can make only broad recommendations, such as: allowing opportunities for students to “shadow” agency professionals as part of concrete experiential learning; using tools such as journals and supervisory discussions for reflective observation; having students relate concepts they have learned in the classroom to facilitate abstract conceptualization; and encouraging students to try different approaches.
in working with clients as part of active experimentation. Refining our recommendations under each of the four learning stages is our most important long-term objective.

This research and education project has become an ongoing part of our field program. We recommend that other programs consider adopting a similar approach. In the short run, there is potential for improving the quality of individual field programs. Over the long run, replication of some of our research could meaningfully augment the profession's knowledge about effective teaching and learning in field education.

REFERENCES


Accepted 7/97.

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