Data-Driven field experiences for Mutual Improvement

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Abstract:  
This paper describes the field experience for teacher librarian (TL) candidates at California State University Long Beach (CSULB). The three key components include: 1) the series of data collection tools that structure the experience; 2) the analytic conversations and actions that arise from analyzing the data jointly; and 3) the impact of the data collection, analysis and actions on the teacher librarian candidate and site teacher librarian’s practices.

Keywords: field experience, data, teacher librarians, school libraries, self-assessment

Background  
California State University Long Beach (CSULB) offers the state- and nationally accredited Teacher Librarian Services Credential Program, which is also a track in the Educational Technology and Media Leadership master’s degree. The capstone experience is on-site field experience. The purpose of field experience is to give the teacher librarian (TL) student/candidate an opportunity to apply the knowledge and skills learned in coursework. The TL candidates are required to complete a minimum of 90 hours working in library media centers for three units of credit. They spend a minimum of 45 hours each at an elementary/middle school and at a high school. Each library media center must be staffed by a credentialed Teacher Librarian, and placements are determined by the program coordinator with candidate input. The site TL, CSULB field experience supervisor, and TL candidate collaboratively develop the field experience action plan at the first meeting, and modify it as needed during the first days of the experience. This plan includes three projects that are completed at the school site: one in teaching and learning, one in technology-enhanced learning environments, and one in program administration. An ethnographic study is also required. All activities should address the program learning outcomes:

- Apply knowledge of multicultural, ethical, and legal issues pertaining to using educational technologies and communication within the global community.
- Synthesize leadership principles within the practice of information and educational technology.
- Apply instructional design principles to locate, evaluate and develop instructional materials.
- Integrate theoretical perspectives to review, interpret, and apply research in learning technologies.
• Demonstrate effective written, electronic, and oral communications that reflect critical thinking and information literacy.
• Design, develop, implement, and assess learning experiences.
• Promote reading for learning, personal growth and enjoyment.
• Organize collections according to standard library cataloging and classification principles.

These outcomes also meet the California Commission on Teacher Credentialing Teacher Librarian Competency Standards and the NCATE Standards for Library Media Specialists MA programs. At the end of the field experience, candidates should be able to demonstrate the capability, experience, motivation, intelligence, initiative, and personal qualities necessary for independently developing and administering a program of service.

Data Points

When TL candidates apply for the field experience, they self-assess their competencies relative to the TL program student learning outcomes, writing a paragraph for each learning outcome, stating their competence, and what they want and need to learn to meet the outcomes. Their assessment helps the program coordinator to assign an appropriate field placement school library site that will help candidates fill in the gaps of their preparation. The self-assessment is also given to the TL at the assigned placement site. At the first field site meeting of the TL candidate, site TL and field experience supervisor, the self-assessment serves as a needs assessment to individually craft the field experience.

As a way to understand how students use the library and its resources, the TL candidate conducts an ethnographic study of a class or group of students using the library (Emerson, Fretz & Shaw, 2011). The observation gives students an opportunity to use a critical eye and authentic context to analyze information behaviors, and ties back to their foundation course. The study summarizes the observations, connects it to information behavior theory, and includes recommendations for library program improvement (e.g., instruction, signage, etc.). This study is shared and discussed with the site TL.

The TL candidate is required to instruct a class of students in two sessions, based on collaborating with a classroom teacher, and informed by the ethnographic study. The field experience supervisor conducts a clinical observation and critique of the instruction and supporting documentation according to a research-based rubric. The candidate, site TL and supervisor debrief the session, and make suggestions for the next instructional opportunity. The evaluation criteria follow.

I. PLANNING FOR INSTRUCTION
   A. Shows evidence of collaborative planning based on information literacy and content standards
   B. Selects teaching methods, activities, assessments appropriate for students and objectives
   C. Considers the developmental needs of all students when planning

II. TEACHING FOR STUDENT LEARNING
   A. Makes learning objectives / instructional procedures clear to students
   B. Actively engages students in the learning process
   C. Adapts instruction to meet the needs of diverse learners
   D. Present concepts through various methods, materials, technology
   E. Links content to prior knowledge /helps students see real-life connections
   F. Uses effective verbal and non-verbal communication
   G. Demonstrations content knowledge throughout instruction
   H. Monitors student understanding; adjusts strategies in response to learner feedback and observation
   I. Uses various assessment strategies to determine if outcome is met

III. LEARNING ENVIRONMENT
   A. Creates a respectful, physically, emotionally safe learning environment
   B. Makes appropriate provisions for individual learning needs
   C. Strives to establish rapport with all students
   D. Communicates behavioral expectations to students
   E. Employs effective management strategies and maintains consistent standards for student behavior
IV. TEACHER PROFESSIONALISM

A. Is professional in appearance and commitment to ethical practice
B. Commands respect with classroom/library
C. Uses feedback from multiple sources to grow professionally
D. Reflects on practices and makes thoughtful changes

The TL candidate is also required to maintain a log/blog of daily on-site activities and reflective learning. This log is sent to the supervisor, who provides feedback in order to optimize the field experience learning.

The site TL provides the field experience supervisor with a summative evaluation of the candidate, which they discuss and mutually agree on. The form follows:

I. Narrative evaluation of candidate’s performance in terms of knowledge, skills, and dispositions
   A. Please comment on the candidate’s field experience performance, including strengths and weaknesses.
   B. How did the candidate impact clientele learning?
   C. Would you recommend this candidate for employment as an educational technology professional in your organization?

II. Holistic evaluation of demonstration of competence on teacher librarian standards (program outcomes)
    The degree to which the entries clearly demonstrate mastery of each program/state standard at the level expected of a beginning professional is evaluated. Each of the relevant standards is holistically assessed and rated on the following scale.
    1 - Evidence in this area is rudimentary; gives very limited or incomplete information relating to skills in this area.
    2 - Basic evidence in this area is clearly presented, but it demonstrates the need for skill development.
    3 - Evidence is clearly presented which demonstrates a level of skill consistent with expectations for completing the candidate’s field experience semester and implement effective professional practice.
    4 - Evidence demonstration a high degree of mastery in this area, and the candidate can independently implement effective professional practice.

The candidate also completes an evaluation of the field experience, which is reviewed by the program coordinator. The elements follow.

1. How important was field experience as part of your credential program?
2. In what ways did field experience provide a good synthesis of your coursework learning?
3. Did your coursework adequately prepare you for field experience?
4. Please evaluate the adequacy of the situations in which you were placed for field experience relative to organization, materials, opportunities for a wide variety of experiences, etc.
5. Please evaluate the work of the supervising teacher librarian and her/his attitude toward you.
6. Please evaluate the work of the CSULB field experience supervisor and her/his attitude toward you.
7. Please evaluate your own work and attitude toward the total field experience.
8. What did you like most about your field experience?
9. How would you change field experience?
10. Do you feel prepared to become a teacher librarian? Why/why not?

The candidate also submits a summative eportfolio, which includes the various data as well as evidence of the activities done in the library. A final self-assessment and reflection complete the documentation for the eportfolio. The field experience supervisor and program coordinator review and grade the eportfolio according to the eportfolio rubric, which is based on the program’s student learning outcomes and the elements of the portfolio itself, which measures technological skill and reflection, as noted below:

1. All needed supporting information for field experience.
2. All learning outcomes supported by evidence and reflective essay.

3. Technical skill demonstrated in portfolio.
   a. Integration of original documents created using a variety of software.
   b. Integration of visual material using scanner, digital camera, etc.
   c. Design and organization (e.g., user-friendly, yet sophisticated)

3. Overall presentation/design of portfolio.

At the end of the term, the candidate completes an evaluation of the field experience, which is reviewed by the program coordinator. The elements follow.

1. How important was field experience as part of your credential program?
2. In what ways did field experience provide a good synthesis of your coursework learning?
3. Did your coursework adequately prepare you for field experience?
4. Please evaluate the adequacy of the situations in which you were placed for field experience relative to organization, materials, opportunities for a wide variety of experiences, etc.
5. Please evaluate the work of the supervising teacher librarian and her/his attitude toward you.
6. Please evaluate the work of the CSULB field experience supervisor and her/his attitude toward you.
7. Please evaluate your own work and attitude toward the total field experience.
8. What did you like most about your field experience?
9. How would you change field experience?
10. Do you feel prepared to become a teacher librarian? Why/why not?

Students also participate in a group debriefing.

Data Analysis

Each data point informs the field experience. In addition, the lesson and eportfolio reviews of all the TL candidates are tabulated, criteria by criteria, to be analyzed for patterns in performance. As such, targeted areas for improvement can be identified and acted upon. As an example, the following figure shows student outcomes performance trends over three years.

Figure 1. Student learning outcome trend comparison

The data showed a decline in communication skills (SLO 5), which required further investigation. The program enrolled more international students over this period, which accounted for the trend. Communication skill could also impact SLO 4: Research. The finding resulted in the program giving more support to student writing through more referrals to the campus writing centre, peer reviews of draft papers, and more portfolio reflection examples. As a result, this trend has turned around.

The ethnographic studies confirmed that candidates could apply information behaviour theory to a novel setting, and make valid conclusions and feasible recommendations. Analyzing student studies led to the recommendation that field supervisor should encourage students to conduct the study early.
in their field experience or order to inform their collaboration with classroom teachers in planning lessons.

Analyzing lesson observations over time revealed a need for students to address diversity more effectively. Student exit group discussion confirmed this need. Therefore, coursework leading to field experience has been strengthened in instructional design considerations of students with diverse needs.

During the field experience, particularly in discussing the various collected data, the site TLs share their own insights and learning. The candidate and site TL routinely express how they learn from each other. For that reason, site TLs happily take TL candidates in future semesters. Furthermore, several TL candidates have been offered TL positions in the site’s school district because of their field experiences. The data offer systematic and rigorous evidence of competence, and not only optimize candidate learning but also facilitate site library program improvement.

These discussions, along with the site TL and candidate summative evaluations provide important qualitative data for analysis. Student logs serve as formative evaluation; especially when logs are submitted in a timely manner, the supervisor can intervene efficiently: redirecting student efforts and clearing up possible confusion.

The qualitative data revealed that technology was the strongest area of mutual learning. As part of my work as the field experience supervisor one semester, I interviewed three recent field experience TL candidates who were chosen to exemplify students with technology skills working with experienced TLs. The candidates' perspectives and activities not only provided insight into factors that facilitate technology training for both beginning and experienced TLs. In analyzing their statements, I came to several conclusions. Mutual respect is a key in training. In each case, the TL candidate was comfortable with the technology so she had a credible standing. Each candidate also respected the supervising librarian when the field experience began. Therefore, a mutually-receptive and supportive learning environment was easily maintained. Training was "just in time" rather than "just in case," so the learning was well appreciated and quickly assimilated. There was also a feeling of longer-term connections, which bodes well for both parties to network professionally. As newer teacher librarians enter the field, they can use these experiences as a model for effective peer coaching, not only for technology but also for other aspects of school librarianship.

**Conclusions**

These field experience procedures can be used as a model for systematic and impactful data analytics for program improvement. Starting with program standards and learning outcomes, library educators can map out field experience steps, and then establish assessments and tools to measure student achievement along the way. Pre-assessments inform placement and learning action plans. Logs and observations provide formative assessments that lead to interventions that refine and optimize the rest of the field experience. Summative evaluations provide evidence of student preparation and program quality.

More generally, analyzing the data across students and terms time helps to identify performance and program trends, which can then investigated more deeply through interviews, focus groups and content analysis to determine possible reasons for the trends, and help faculty to create targeted interventions for student success and program improvement.

**References**


