

Enhancing Online Structured Dialogue During Teaching Internships Through Digital Storytelling to Promote Professional Socialization

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Abstract: We conducted a five-year design-based research that aimed to investigate the conditions necessary to create a weblog community where the student teachers could discuss the variety of work-related experiences they encountered during their internships with the goal of fostering teachers' professional socialization and identity development. We introduced digital storytelling so that student teachers could visualize their prospective internships and could then engage in a dialogue related to teachers' professional socialization and identity development. A social network analysis (SNA) showed a relatively stable impact of prospective storytelling on the online dialogue that structurally demonstrated teachers' professional values and social behaviors, rather than focusing solely on their teaching.

Introduction

A student teacher's experience with a particular school's institutional and ecological aspects is the strongest determinant of one's teaching outlook (Fenstermacher 1980). Practicum can function as a factor in developing professional identities and increasing socialization through an intensive working experience. Sharing and examining such working experience in schools is essential for student teachers to effectively develop their professional identity and increase professional socialization. Our research indicated that a weblog community with an experienced teacher during the practicum could be an excellent resource for professional socialization by allowing the student teachers to exchange practical knowledge, impressions of their respective working environments, and solutions to various problems.

The purpose of the current study is to investigate the conditions necessary to create a weblog community where the student teachers could discuss the variety of work-related experiences they encountered during their internships with the goal of increasing teachers' professional socialization and building their professional identity. Storytelling can be another means to represent the teachers' professional identity and socialization, that is constructed in their life stories as workers in the school (Atkinson and Delamont 1985). This study examines the potential benefits of digital story telling (DST) wherein the student teachers share their prospective experiences to obtain a broader understanding of schools as workplaces, with improvement in the quality of online dialogue in the weblog community from the viewpoint of professional socialization.

Research design

A design-based research methodology was applied for five years in an on-campus course as a part of a Japanese undergraduate teacher training program requiring a two to three-week practice teaching internship at a school (Table 1). The student teachers were asked to access the weblog community and post a weblog on their working experience every 2 or 3 days throughout the internship, as well as to comment on weblog entries of other student teachers. DST was implemented from the 3rd year, just before the practicum began. Each student teacher made a presentation using their prospective working stories created with a cartooning application before their practicum. The student teachers could foster their professional socialization and identity development by imagining potential scenarios (including relationships with key individuals and cultural artifacts).

Table 1: Overview of the participants, weblog activities, and interventions.

Year	# of Student Teachers	# of Weblogs	# of Comments	An Experienced Teacher's Participation as a Facilitator on the Weblog Community	DST
1	15	102	155 (355)	Online only, actively providing comments	No
2	9	82	366 (430)	Online (inactive) and face-to-face (with insightful comments)	No
3	7	82	180 (221)	Providing comments and asking questions both online and face-to-face from a professional teacher's perspective	Yes
4	16	118	125 (326)		
5	8	41	51 (93)		

Note: Numbers in parentheses include the professional's facilitations and comments.

Weblogs and comments were coded for ascertaining to what extent the student teachers wrote about working as schoolteachers, and whether they took the school's institutional characteristics into consideration. The coding scheme was based on Hong (2010), including (1) Commitment Towards Work, (2) Value and Standpoint as Teachers, (3) Emotion, (4) Micropolitics, (5) Efficacy, and (6) Knowledge and Beliefs of Teaching, as well as (7) Expectations and the Reality of Schools, (8) Social Behavior as Professionals, and (9) miscellaneous category. When a weblog or a comment entry had multiple categories, each category was counted; coding discrepancies were resolved through discussion. Furthermore, to evaluate the quality of online dialogue during each academic year regarding discourse structure, a social network analysis was conducted using Knowledge Building Discourse Explorer (Oshima, Oshima, and Matsuzawa 2012). We focused on degree centralities of each coded category related to teacher socialization and professional identity development to assess temporal structural qualities indicating the linkage of the categories pertaining to such development.

Results and discussion

Figure 1 shows differences in transitional changes of the sum of degree centralities and each category's degree centrality related to teacher socialization and identity development, focusing on values and standpoints, and on social behavior as professionals. The graphs showed a tendency for transitions in the 3rd, 4th, and 5th years to have a relatively higher stable value when compared to the 1st and 2nd years, indicating that the student teachers' discourse concentrated densely on teacher professional socialization. One-way ANOVA with Bonferroni post hoc analysis for 5 factors (years) with the sum of degree centrality as the dependent variable revealed that each sum of degree centralities for the 3rd ($n = 303$, $M = 5.02$, $SD = .995$), 4th ($n = 446$, $M = 4.69$, $SD = 1.15$), and 5th ($n = 136$, $M = 4.68$, $SD = 1.12$) years was significantly higher than those for the 1st ($n = 457$, $M = 2.89$, $SD = .947$) and 2nd ($n = 512$, $M = 3.63$, $SD = 1.52$) years; $F(4, 1849) = 214.103$, $\eta_p^2 = .317$, $p < .001$.

Similar one-way ANOVAs with Bonferroni post hoc analyses using the degree centrality for each category as the dependent variable revealed that the indicators of "Value and Standpoint" for the 3rd ($M = .595$, $SD = .258$), 4th ($M = .576$, $SD = .214$), and 5th ($M = .562$, $SD = .274$) years were significantly higher than those for the 1st ($M = .270$, $SD = .235$) and 2nd ($M = .364$, $SD = .297$) years; $F(4, 1849) = 129.316$, $\eta_p^2 = .219$, $p < .001$, with Bonferroni post hoc analysis. Moreover, the indicators of "Social Behavior" for the 3rd ($M = .762$, $SD = .121$), 4th ($M = .691$, $SD = .175$), and 5th ($M = .756$, $SD = .189$) years were significantly higher than those of the 1st ($M = .512$, $SD = .209$) and 2nd ($M = .554$, $SD = .265$), even though there were significant differences between the 4th and 3rd/5th years; $F(4, 1849) = 107.387$, $\eta_p^2 = .189$, $p < .001$.

This indicates that the third-year design comprising storytelling about the student teachers' prospective work experiences fostered structured dialogue from the viewpoint of teachers' professional socialization.

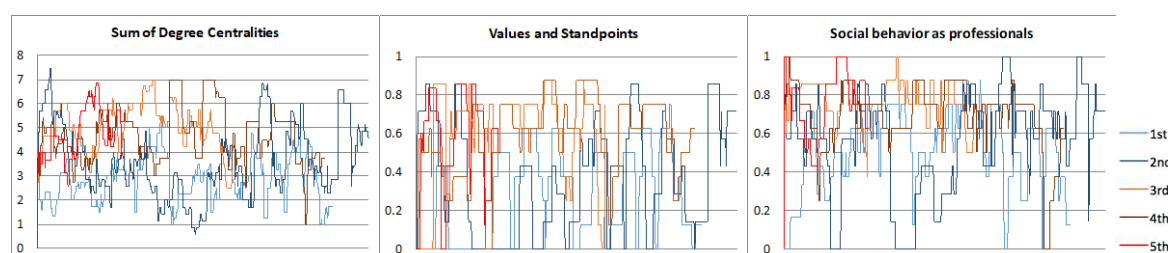


Figure 1. Changes in degree centralities in each year (horizontal axes: conversational turns of posts).

References

- Atkinson, P., & Delamont, S. (1985). Socialization into teaching: The research which lost its way. *British Journal of Sociology of Education*, 6(3), 307–322.
- Fenstermacher, G. (1980). On learning to teach from research on teacher effectiveness. In C. Denham & A. Lieberman (Eds.), *Time to learn* (pp. 127-137). Washington, DC: U.S. Dept. of Education.
- Hong Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education*, 26, 1530-1543.
- Oshima, J., Oshima, R., & Matsuzawa, Y. (2012). Knowledge Building Discourse Explorer: a social network analysis application for knowledge building discourse. *Educational Technology Research and Development*, 60(5), 903–921

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