Making Meaning: Connecting School to Hawaiian Students' Lives

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Hawaiian students are more likely than their peers to have negative educational outcomes. This may result from a mismatch between students' expectations and interests and those of school personnel. Educators can improve this situation by contextualizing instruction—connecting new information with what students already know from prior home, school, and community experiences. The Hawaiian Studies Program (HSP) is an academic program that incorporates Hawaiian culture with more typical secondary curriculum for students in Grades 10–12. This investigation explored whether participation in a 3-year study group influenced HSP teachers' contextualized instruction. Analysis of teachers' instruction indicated that contextualized instruction increased over 2 years and declined slightly in the 3rd year. Study group transcripts and teacher interviews suggested that over the 3 years, teachers talked more about how they were implementing contextualized instruction and could increase its application.

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Hūlili: Multidisciplinary Research on Hawaiian Well-Being Vol.2 No.1 (2005)

Several indicators suggest that Native Hawaiians may have more negative educational outcomes compared with their peers. Standardized achievement scores for Hawaiian students in public schools are among the lowest in the state (Kana'iaupuni & Ishibashi, 2003; Office of Hawaiian Affairs, 1994; Takenaka, 1995). Hawaiian students also have higher dropout and grade retention rates and are overrepresented in special education and underrepresented in higher education (Kana'iaupuni & Ishibashi, 2003; Office of Hawaiian Affairs, 1994; Takenaka, 1995; University of Hawai'i Institutional Research Office, 2002). One reason Hawaiian students may experience these negative educational outcomes may stem from a mismatch between their own expectations and interests and those of school personnel (Tharp, 1989; Tharp, Estrada, Dalton, & Yamauchi, 2000; Yamauchi, 2005). The expectations and values of school are often based on that of the majority culture (Dyson & Genishi, 1991; Heath, 1983; Tharp et al., 2000). Results of many studies indicate that students from nonmajority backgrounds tend to misunderstand classroom expectations and are often misunderstood by their teachers (e.g., Erickson, 1980; Foster, 1992; Heath, 1983; Philips, 1972). In addition, many nonmajority students do not find what they are learning in school to be relevant to their lives outside the classroom.

In sociocultural theory, the term *intersubjectivity* is used to refer to shared meaning that develops among people who have a history of interaction (Tharp et al., 2000; Vygotsky, 1978). This includes shared perspectives, values, beliefs, and expectations. When teachers and students come from different cultural backgrounds, there tends to be less intersubjectivity between them, and cultural clashes or misunderstandings are more likely to occur. This may be the case for Native Hawaiians, as they are also underrepresented in the teaching force (Benham & Heck, 1998).

One way to increase intersubjectivity in the classroom is to contextualize instruction by incorporating what students already know with the new information presented. Contextualization is one of the Standards for Effective Pedagogy, principles proposed by Tharp and colleagues (Tharp et al., 2000) as universal standards that should guide effective instruction for culturally diverse students. Contextualization includes not only teaching in ways that are consistent with familiar socialization patterns but also using curriculum that integrates academic concepts with students' prior knowledge. For Hawaiian students, this might involve teachers integrating Hawaiian knowledge and values into the curriculum, moving activities outside and to other culturally relevant settings, or "talking story" with students in ways that are consistent with the conversations they have at home (Au & Jordan,

1981; Yamauchi, 2005; Yamauchi & Wilhelm, 2001). The purpose of this study was to promote teachers' use of contextualization in a public school program serving a majority of Hawaiian students.

The Hawaiian Studies Program

The Hawaiian Studies Program (HSP) at Waiʻanae High School is an example of an academic program designed to contextualize learning within the Hawaiian culture. The HSP is a voluntary program for students in Grades 10–12 that integrates the learning of Hawaiian culture and values with secondary curriculum in science, social studies, and English. Located on the western end of the island of Oʻahu in the state of Hawaiʻi, Waiʻanae High School is a large rural public school. Like the community it serves and the majority of students in the HSP, the student population at Waiʻanae High School is predominantly Hawaiian (Hawaiʻi State Department of Education, 2003). The school also serves a large number of low-income families and has the state's largest populations of special education students and those who drop out of school (Hawaiʻi State Department of Education, 2003; Yamauchi & Carroll, 2003).

Founded in 1996, the HSP served 60 to 90 students each year. The program involved teaming and looping so that the students stayed with the same teachers and peers throughout their involvement in the program (Yamauchi, 2003). HSP students also enrolled in non-HSP classes. A hallmark of the HSP was its weekly service-learning fieldwork in the Waiʻanae community (Yamauchi, Billig, Meyer, & Hofschire, in press). Each Thursday, the students and their teachers dispersed into the community to participate in service-learning projects that were planned and supervised by members of various community-based organizations. One group of students worked with professional archaeologists to map cultural sites in Waiʻanae Valley and restore what they found. Other students participated in (a) native plant restoration and reforestation work, (b) studies of the Waiʻanae and Mākaha stream environments, (c) health promotion activities at the Waiʻanae Coast Comprehensive Health Center, and (d) activities focused on canoe construction and traditional maritime culture.

Contextualization in the Hawaiian Studies Program

The fieldwork described above is one way the HSP was contextualized within students' prior experiences and represents how Hawaiian values can be integrated into academic curriculum. Researchers who developed a tool to assess the Five Standards for Effective Pedagogy note that there are qualitative differences between incidental and integrated connections made in the classroom (Hilberg, Doherty, Epaloose, & Tharp, 2004). Incidental connections occur when teachers, in the midst of instruction, make spontaneous connections to students' prior experiences (Yamauchi, Wyatt, & Carroll, 2005). On the other hand, integrated connections are planned in advance, when a lesson is structured purposely to make connections between what students are learning and what they already know. In some cases, a familiar theme becomes the focal point of the lesson.

The HSP fieldwork provided an opportunity for teachers to integrate Hawaiian values with subject matter, connecting new information within the context of what students already know. The field projects were designed to apply academic concepts to a context familiar to students. For example, in the environmental field rotation, students applied what they were learning in their science classes to collecting and analyzing data on the ecosystem of community stream environments. Students also wrote reports about this work for community members.

The HSP founders believed that student learning and motivation would be enhanced if instruction incorporated Hawaiian values and knowledge (Tharp & Gallimore, 1988). In addition to the fieldwork, HSP teachers strived to contextualize their instruction by incorporating Hawaiian issues and by considering the relationships between Western and Hawaiian concepts. For example, in science, students learned how the Western concepts of ecosystem and sustainability were related to the Hawaiian concept *mālama i ka 'āina,* or care for the land (Yamauchi et al., 2005). In English classes, students read literature and essays by Hawaiian authors and discussed their cultural and historical significance.

Members from more than 12 community agencies were involved in the HSP and assisted teachers in developing contextualized instruction (Yamauchi & Purcell, 2003). Some of the community organizations prepared curriculum that was contextualized in the Hawaiian culture. Others organized annual retreats for teachers

and community partners to discuss long-range planning, including the incorporation of Hawaiian culture into the curriculum. A small group of community members and teachers also met biweekly to discuss program development. Teachers relied on community members to help identify aspects of the Hawaiian culture that could be integrated into the curriculum and specific ways this might be done. For example, one group of the community partners said it was a problem that some people in the community were driving off-road vehicles on the beach and destroying cultural sites. They wondered if it might be possible to raise these issues with HSP students, emphasizing Hawaiian values related to taking care of the environment, respect, and responsibility. Another community member suggested that this was relevant to the social studies classes, as the teacher conducted lessons on individual and collective rights and American civil liberty.

Promoting Contextualized Instruction Through a Study Group

Contextualization in the HSP was also promoted through a 3-year teacher study group organized by the Center for Research on Education, Diversity and Excellence (CREDE), one of the community partners. The professional development focused on contextualization and the four other Standards for Effective Pedagogy. The teachers met weekly for 2 years and biweekly for a 3rd year to learn about the standards and how to enact them in their instruction. A CREDE researcher facilitated the 60- to 90-minute meetings, during which the teachers watched videotaped segments of their own and other teachers' instruction and rated the excerpts for enactment of the five standards. This became the basis for discussions about how to improve implementation. The study group also facilitated teachers' (a) keeping journals about their enactment of the standards, (b) conducting classroom research on a standard they wanted to improve, (c) developing portfolios that exemplified their enactment of all standards, and (d) making professional presentations about their enactment of the standards. The purpose of this study was to investigate the extent to which these professional development experiences may have influenced HSP teachers' contextualized instruction.

Method

Participants

All four HSP teachers participated in the study. Mike taught social studies, Erich taught science, Dan taught English, and Linda taught Hawaiian language. In Year 1, Linda had been teaching for 16 years, Mike for 7, Erich for 5, and Dan for 3. Year 1 of the study was Linda's 6th year in the program, and she was one of the program founders. It was Mike's 2nd year teaching in the program and the 1st year for Erich and Dan. After Year 1, Linda moved to another island and discontinued participation in the study group. She did, however, participate in the Year 3 interviews. For the first 2 years, participating teachers were granted release time from other duties and received graduate-level credits for their participation.

Ratings of Teachers' Videotaped Instruction

Each semester, teachers were videotaped while teaching in the classroom and during field instruction. Fifty-six videotapes were made over six semesters. Two coders rated the tapes independently for implementation of the contextualization standard using the Standards Performance Continuum (SPC), an instrument designed to measure enactment of the Five Standards for Effective Pedagogy (Hilberg et al., 2004). SPC scores range from 0 to 4 (0 = *not present,* 1 = *emerging,* 2 = *developing,* 3 = *enacting,* and 4 = *integrating*). See Table 1 for the criteria for each contextualization standard score. Raters 1 and 2 coded tapes from Year 1. Percentage agreement between these coders was 97%, including perfect matches and scores that were different by 1 point. Raters 3 and 4 coded tapes from Years 2 and 3. The percentage agreement for Raters 3 and 4 was 96% for perfect matches and scores that were different by 1 point. To check for consistency across the two sets of raters, Rater 4 coded 3 of the 16 Year 1 tapes. Percentage agreement for these ratings was 100% for perfect matches and scores that were different by 1 point. For all ratings, discrepancies in scoring were discussed until consensus was reached. For each teacher, mean scores for each semester were analyzed across the 3 years to determine change across time.

TABLE 1 SPC scoring criteria for the contextualization standard

Score	Description	Criteria
0	Not observed	Contextualization is not observed.
1	Emerging	The teacher (a) includes some aspect of students' everyday experience in instruction, OR (b) connects classroom activities by theme or builds on the current unit of instruction OR (c) includes parents or community members in activities or instruction.
2	Developing	The teacher makes incidental connections between students' everyday experience/knowledge from home, school, or community and the new activity/information.
3	Enacting	The teacher integrates the new activity/information with what students already know from home, school, or community.
4	Integrating	The teacher designs, enacts, and assists in contextualized activities that demonstrate skillful integration of multiple standards simultaneously.

Note: Criteria quoted from "The Standards Performance Continuum: A performance-based measure of the standards for effective pedagogy," by R. S. Hilberg, R. W. Doherty, G. Epaloose, & R. G. Tharp. In H. C. Waxman, R. G. Tharp, & R. S. Hilberg (Eds.), *Observational research in U.S. classrooms: New approaches for understanding cultural and linguistic diversity,* 2004, p. 58. Cambridge, England: Cambridge University Press.

Teacher Study Group Recordings

The first author facilitated the study group meetings for the first 2 years and then assisted with planning for the 3rd year's meetings. All study group meetings were audio recorded and transcribed. The transcripts were coded for indications of changes in the teachers' implementation of the contextualization standard, so that everything that a teacher said about contextualization was examined across the 3 years of the study. Once these utterances were identified, they were further analyzed to determine whether more was said about the standard and the teachers' use of the standard as time passed. Transcripts were also examined in conjunction with the SPC results. That is, the transcripts were examined to see if changes in the SPC scores were related to study group activities.

Interviews

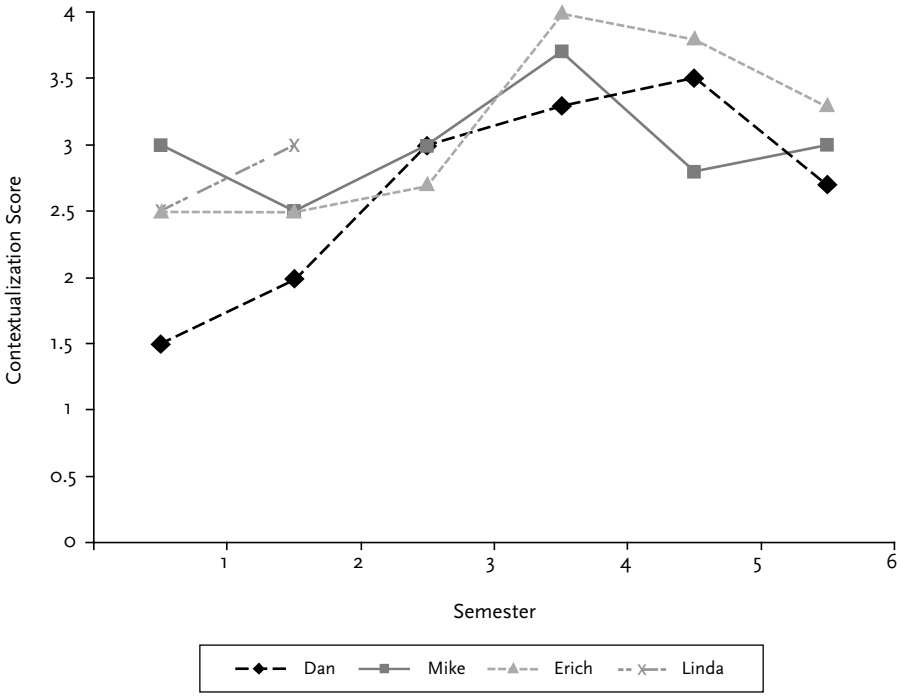
Each teacher was interviewed individually at the end of Year 3. The interviews lasted 60 to 90 minutes and focused on the teachers' knowledge and implementation of the five standards and their perceptions of the study group. The teachers were shown their SPC scores across the 3 years of the study and were asked to comment on the reasons why they felt scores increased or decreased during different semesters. The interviews were audio recorded and transcribed. The interview data were analyzed by determining teachers' perceptions of (a) the contextualization standard, (b) the study group, and (c) the effects of the study group and other variables on their implementation of the contextualization standard.

Results

Change in SPC Contextualization Scores

Mean SPC scores indicated that all teachers generally increased the contextualization of their instruction through Year 2, with a slight decline in the 3rd year (see Figure 1).

FIGURE 1 Mean contextualization standard scores for each teacher across the six semesters of the study group.



Other Evidence for Changes in Teachers

Analysis of the study group transcripts suggested that across the 3 years, the teachers talked more about how they were or would be integrating local and Hawaiian issues in their instruction. At the beginning of Year 1, little was spoken about these issues. By the end of the same year, the teachers all discussed specific ways to integrate more of students' prior experiences into classroom activities. Study group transcripts in Year 2 suggested that by the end of that year, both Dan, the English teacher, and Mike, the social studies teacher, were using more texts written by local authors and making incidental or integrated connections to Hawaiian and community issues in their classrooms. For example, one of the study group facilitators assisted Dan in selecting books written by Hawaiian and other local authors on topics that were related to students' fieldwork. Dan used these

readings to develop student-led literature discussions. In one of the study group meetings, Dan noted that students were motivated by these readings and sometimes requested more books to read (something that had not occurred before he began using this new literature). Mike commented that some of the HSP students were reading books from Dan's course in his class, when they were engaged in the 15 minutes of sustained silent reading that was a school requirement for every class period.

Analysis of the Year 3 study group transcripts indicated that in the second semester there was much discussion around lesson planning and how best to integrate Hawaiian issues into the curriculum. At this time, the teachers were developing classroom lessons involving local ecology and historical–political decisions. Discussions at the end of Year 3 were also focused on teachers looking for ways to make connections between what students were learning in the classroom and during their fieldwork. In the last semester of Year 3, Erich described how he could relate issues from his science class to diet and health problems among Hawaiians.

> *Facilitator:* Is there a way that they could...make some connections [from their fieldwork at the health center] with what [they're] learning in the classroom?
>
> *Erich:* Oh, absolutely. We're going to get to digestion next, so possibly [I could make connections to]..."What was the diet like of ancient Hawaiians? And...look at the diet of Hawaiians today,...why do they have problems with diabetes, obesity?"...You know, all of the foods have changed...they have Western foods which are no [good] compared to their [former]...diet. (Erich, study group transcription, 2004)

Why Did SPC Scores Decline in Year 3?

SPC scores for Year 3 decreased slightly for all teachers in the study group, compared with the previous year's ratings. There are a few possible reasons for this decline. First, in Year 3, the high school began implementing a comprehensive

school reform model, which the teachers felt distracted them from their focus on professional development. The application of this comprehensive school reform model meant that the HSP teachers had to prepare additional materials and new courses and figure out how the HSP would fit the reform model. There was much anxiety around changes brought about by the reform implementation in terms of how it affected both the teachers and the program. During their interviews, two of the teachers said that the demands of the reform implementation had made a difference. They said they were surprised and saddened by Linda leaving the program at the end of Year 1, as she had previously taken the role of lead teacher for so many years. Year 2 was a struggle, but the group managed to overcome the challenges. In Year 3, with all the difficulties and demands of the reform implementation, the teachers felt they had become overwhelmed and distracted.

Implementation of the school reform model also meant that the teachers were required to recruit more students for the program. At one point, the administrators said there were not enough students to run the program in Year 3. Although in previous years the program supported 60 to 70 students, school administrators wanted the teachers to recruit 90 to 100 students for Year 3. The HSP teachers and students embarked on a recruitment drive, and this resulted in adequate enrollment. However, this may have also led to enrollment of students who were less motivated than students in previous years. Teachers reported, in Year 3, that the students that year were less motivated than other groups in the past. Some students did not show up for classes and the community fieldwork. The latter had never happened before. The program had previously run by the motto "Easy in, easy out," indicating that all were welcome to join the HSP, but high standards of behavior were maintained such that chronic misbehavior would result in students being asked to leave. In Year 3, the teachers reported that school counselors and administrators would not allow them to transfer out students who were not adhering to program standards or who had expressed interest in leaving. The teachers also felt that some of the school counselors viewed the program as a "dumping ground" for students who were chronically misbehaving in the regular school program or otherwise not succeeding in school. The teachers spent more time in Year 3 dealing with student misbehavior and apathy, and this may also have distracted them from the professional development goals and activities.

A final possible reason for the decline in Year 3 scores was offered by one of the HSP teachers in his Year 3 interview. He suggested that by the 3rd year, the teachers felt they had a good understanding of how to implement the contextualization

and other standards into their lessons and perhaps falsely assumed that they were continuing to perform at previously high levels. Although the teachers received feedback about their implementation of the standards during the study group, they did not see all of their "official" SPC scores until the end of Year 3.

Discussion

The purpose of this study was to investigate the extent to which professional development, designed to promote the contextualization standard, increased HSP teachers' implementation of contextualized instruction. Analysis of the SPC scores and transcripts of the study group and interviews over the 3 years indicated that teachers' implementation of contextualized instruction increased over 2 years and declined slightly in the 3rd year. The HSP was chosen as a CREDE demonstration site because it appeared to exemplify a number of the Five Standards for Effective Pedagogy, including the contextualization standard (Yamauchi, 2003). It is not surprising, then, that teachers found contextualized instruction relatively easy to implement, as the program was founded on the notion that Hawaiian students will benefit academically from a program that integrates the learning of Hawaiian culture with more typical high school curriculum.

We attribute increases in teachers' implementation of the contextualization standard to their participation in the HSP study group. Study groups are one means of professional development designed to promote change in instruction in a sustained and social context. Study groups provide opportunities for dialogue and support as teachers learn about new instructional strategies, apply them to their classrooms, and report back on the results (Abdal-Haqq, 1996; Chiu, 2001; Johnson, 1993; McWhorter & Bullion-Mears, 1997). Study groups, like the one utilized in this investigation, may include university researchers or other educational specialists who facilitate discussions and bring an "outside" perspective (Burnaford, Fischer, & Hobson, 2001; Cherubini, Zambelli, & Boscolo, 2002; Hilliard, 1997; Sandholtz, 2002; Sparks, 1994).

The HSP professional development included many aspects of study groups that have been found to be productive. The literature suggests that successful study groups support teachers' construction of their own knowledge, promote teachers working on "real" challenges applied to their own classrooms, and honor teachers' expertise (McWhorter & Bullion-Mears, 1997; National Research Council, 1996).

A goal of the HSP study group was for teachers to build their own understanding of the contextualization and other standards and to apply this to their instruction. The first semester of the group was spent reading about and discussing the five standards as they had been applied in other classrooms. Thereafter, the teachers were encouraged to consider ways they already implemented the standards and could increase application. Study group activities such as keeping journals about their use of the standards, conducting research on their own practice to increase enactment of a standard, and developing portfolios that exemplified their use of the standards may have also promoted the teachers' construction of knowledge about the standards and application to teaching. In essence, these activities created a learning setting that was itself contextualized within the teachers' prior and ongoing experiences as educators. Contextualized instruction is good for teacher learning, just as it is for student learning.

Teachers reported that watching videotaped excerpts of their own and their colleagues' instruction was helpful in promoting their increased contextualization. Although the HSP teachers met jointly to plan for the program, they rarely had opportunities beyond the study group to observe their colleagues teaching. As Willis (2002) pointed out, videotaped observations of teaching, and the discussions that they may prompt, are effective tools for instructional improvement:

> Teaching is a performance; it's not something that's represented on paper. It occurs in real time, in a real classroom, with real students. If you want to improve teaching, you need to find ways of studying the process. Video is the best way of representing that process so that you can study it. You could observe live classrooms—that's an important experience, and we should keep doing it—but video allows you to come back, observe the lesson with a group, talk about it, analyze it, and do the kind of work that can actually improve your teaching. (p. 8)

Our results suggest that a study group may be a way for teachers to learn how to contextualize their instruction for Hawaiian students. This may be beneficial for many teachers, who vary in their familiarity with Hawaiian and other local cultures. None of the teachers in this study were of Hawaiian ancestry, although three of the four teachers were long-time residents of the islands, and two lived in the Wai'anae community. A study group can assist teachers in their integration of Hawaiian and other local knowledge into classroom practice. If teachers are not familiar with local issues, community members may be invited to attend meetings to share their ideas on what is culturally appropriate and valued and to discuss ways that school practices might incorporate these ideas. After implementing lessons, teachers can watch videotaped excerpts of their instruction and discuss outcomes and future implementation.

Limitations

This study was limited by a small sample size, and results may not generalize to other teachers in different settings. As it was not possible to compare the HSP teachers with other educators who did not participate in the study group, we cannot be certain that improvements in contextualized instruction were due to participation in the study group. Another limitation was that the teachers knew they were being observed and recorded, thus their reactivity may have influenced our results. The teachers may have answered in socially desirable ways when responding in interviews and during the study group meetings. When videotaped while teaching, they may also have acted in ways that did not reflect typical instruction.

Future Research and Directions

We will be analyzing our data to determine whether there were similar trends for teachers increasing their implementation of other aspects of the Five Standards for Effective Pedagogy. Future research is needed to focus on the long-term effects of study group participation. For example, we do now know whether the HSP teachers were able to maintain increases in contextualized instruction after the study group ended. Research is also needed to determine whether participation in a similar study group would increase contextualized instruction among other educators of Hawaiian children and youths teaching different levels and

subject areas. Research that utilizes a larger sample of teacher participants and an experimental design with a control group of teachers who do not receive professional development would also be helpful in ascertaining that effects are due to professional development. Finally, contextualized instruction is based on the notion that learning increases when connections are made between students' prior knowledge and new information. Future research could address whether increases in teachers' contextualized instruction are related to enhanced learning among Hawaiian students.

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We thank the Hawaiian Studies Program teachers for their participation in the study. We are also grateful to Valerie Dutdut, Kelsey Yonamine, Sherrice Horimoto, and Fumiko Wellington for technical assistance and appreciate comments from Barbara DeBaryshe, Ernestine Enomoto, Cecily Ornelles, and Tracy Trevorrow on earlier drafts of this article. While preparing this article, the first two authors were supported under the Education Research and Development Program (PR/Award R306A6001), the Center for Research on Education, Diversity and Excellence, as administered by the Office of Education Research and Improvement (OERI), National Institute on the Education of At-Risk Students (NIEARS), and the U.S. Department of Education. The contents, findings, and opinions expressed here are those of the authors and do not necessarily represent the positions or policies of OERI, NIEARS, or the U.S. Department of Education.

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