

## **Promoting student engagement through scholarship in a teacher preparation program**

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*Abstract: A project entitled “Academic Presentations and Publications by Leaders in Education” (Project APPLE) was developed to offer pre-service teachers opportunities to grow professionally outside traditional coursework requirements. Project APPLE seeks to engage students in teacher education programs in two types of scholarly activities: professional conference presentations (Phase A) and publications (Phase B). This article describes the project’s goals and evaluates Phase A of the project. Practical suggestions are presented to develop professional development projects in teacher education programs that wish to promote early student engagement in scholarly activities.*

*Keywords: student engagement, scholarship, institutions of higher education.*

### **I. Introduction.**

Project APPLE (Academic Presentations and Publications by Leaders in Education) was developed to support pre-service teachers’ professional development outside traditional coursework requirements. The project’s main goal is to involve educators—who keep abreast of new developments in their field and seek to develop their skills—in profession-enhancing scholarly activities. Project APPLE has two objectives: First, to encourage student participants to identify and research their own areas of interest. Second, to engage students in two types of scholarly activities: conference presentations (Phase A) and publications (Phase B).

In pursuing these objectives, Project APPLE fosters the scholarship of teaching and learning (Isaacson, 2000) in three ways; faculty and student participants (a) expand and reflect on their knowledge and experience as pre-service or in-service teachers, (b) integrate their knowledge through collaborative work, and (c) share their knowledge publicly via presentations and publications. The project also responds to three critical issues in the field: the preparation of highly qualified teachers in grades K-12 (U.S. Department of Education, 2005b); the increasing need for educators able to integrate diversity, multiculturalism, and higher levels of technological literacy into instruction (National Board for Accreditation of Teacher Education [NCATE], 2002; Languages Other Than English [LOTE] Center for Educator Development, 2006); and the need for professional development in undergraduate programs (U.S. Department of Education, 2005a; Higher Education Act, 1989, section 201; U.S. Department of Education, 2004).

This article describes APPLE’s inception, development, and evaluation of Phase A of the project, which focused on pre-service teachers’ conference presentations on regional, state, and national levels. In addition, the plan of action for Phase B of the project and practical suggestions for those interested in developing similar professional enhancement projects in teacher education programs are presented.

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## II. Theoretical Framework.

Student engagement is generally considered to be among the better predictors of learning and personal development (Hu and Kuh, 2002, 2003; Kuh, Schuh, Whitt, and Associates, 1991). It is defined as the quality of effort students themselves dedicate to educationally purposeful activities such as studying, interacting with faculty members and peers on an intellectual level, and using libraries and technology for academic purposes (Astin, 1993; Chickering and Reisser, 1993; Pascarella and Terenzini, 1991). The premise behind student engagement as a predictor of learning is obvious; students learn from what they do in college. Therefore, the more students study, practice a subject, write, analyze, or problem solve, the more they will learn (Carini, Kuh, and Klein, 2006; Kuh, 2003). Empirical studies have supported this assumption, indicating a positive correlation between student engagement and critical thinking (Pike and Kuh, 2005), higher grades (Astin, 1993; Carini, Kuh, and Klein, 2006; Pike, Schroeder, and Berry, 1997), self-reported gains (Hu and Kuh, 2003), and persistence rates (Pike, Schroeder, and Berry, 1997).

Critics of the quality of undergraduate education in the U.S. encourage institutions to provide more hands-on, inquiry-related experiences to empower students as learners through their engagement in the exploration and discovery of knowledge (Association of American Colleges and Universities, 2002; National Commission on the Future of Higher Education, 2006). This recommendation is also extended to teacher preparation programs in American colleges of education. A recent study by Carini and Kuh (2003) reported results on the 2001 National Survey of Student Engagement (NSSE). Findings from their randomly-selected sample of 31,000 seniors from 317 four-year U.S. colleges and universities suggest that college students' lack of high quality experiences is more pronounced in teacher preparation programs than in other undergraduate programs. The study compared students from various university majors in terms of their level of engagement as defined by behaviors associated with high levels of learning (i.e., study time, student/faculty interaction, active and collaborative learning, enriching educational experiences). Results showed that the overall level of engagement in effective educational practices reported by future teachers was well below what may be generally desirable at the college level. When compared with their peers in other majors, future teachers also reported lower levels of student/faculty interaction, writing a larger number of short papers, taking courses that required little analytic thinking, and having fewer academic conversations with culturally diverse peers. Given this scenario, how can we promote pre-service teachers' engagement as well as active and collaborative learning in educationally enriching activities? One way to attain this goal may be through professional development opportunities that encourage students' active participation in conference presentations and the production of scholarly publications.

Aspects of the professional development of young scholars include publishing, networking in professional settings, preparing a resume, becoming a member of professional organizations, and participating in annual meetings within these organizations (Holloway, Sanchez, and Olson-Pacheco, 2004; Scott and Symens, 1997; Silvia, 2007). Some studies in the published literature describe workshops and programs dedicated to professional development for undergraduate and graduate students, especially in the areas of publishing (Figgins and Burbach, 1989; Lumsden, 1984) and membership in professional organizations (Scott and Symens, 1997). In contrast, there is a lack of studies that explore ways to promote students' participation in scholarly activities such as presentations at annual conferences of professional organizations,

where young scholars network, are able to receive valuable feedback from experienced researchers, and stay abreast of the latest developments in their field. This study describes and evaluates a project whose goal is to engage students in teacher education programs in professional conference presentations (Phase A) and publications (Phase B).

### **III. Project APPLE.**

Project APPLE was conceived as a professional development opportunity with a focus on the integration of language diversity, multiculturalism, and higher levels of technological literacy in a teacher preparation program. The project originated at a time when the enforcement of standards for higher teacher quality and higher standards in teacher preparation were on the rise at the national level under No Child Left Behind (NCLB) and the Higher Education Act (HEA), respectively (U.S. Department of Education, 2004; 2005a). At the time, internal institutional efforts to align teacher preparation curricula with state and national standards (NCATE, 2002; LOTE Center for Educator Development, 2006) had also resurfaced at the college level.

#### *A. Project's Inception.*

The university's teacher preparation program developed Project APPLE with funds from the mentoring component of a former Title VII grant, which was designed to support pre-service teacher's professional development experiences. The funds were mainly used to purchase office supplies required for the preparation of conference presentations. Six leaders (three faculty members and three graduate students) with extensive experience in conference presentations and/or publications spearheaded the project with the purpose of disseminating information on how to present at professional conferences and publish scholarly work. Thirty-two students (18 undergraduate and 14 graduate students) participated during the project's first phase. The students were representative of the non-traditional student population on campus, whose vast majority (91%) were female and between the ages of 20 and 24. The ethnic diversity among leaders and participants included African-American, Asian, Caucasian, and Hispanic.

#### *B. The APPLE Model.*

The APPLE model consists of two main components: (a) thematic foci that respond to areas of knowledge expected from teachers, and (b) mentoring as a tool to encourage student engagement and the development of students' skills as professional presenters and writers.

*Thematic foci.* Themes originate from students' individual interests in the curriculum. Their chosen areas of interest include the teaching of mathematics, reading, English as a second language, native/second language acquisition and development, dual language teaching, parental involvement, grant writing for teachers, and applications of technology in instruction.

*Mentoring.* Faculty members participating in Project APPLE communicate high expectations for student performance, both inside and outside the classroom. The role of these faculty members is to serve as role models for scholarship and professional growth, open professional opportunities for mentees, and help protégés navigate in the culture of academe (Espinoza-Herold and Gonzalez, 2007; Gonzalez, 2003). Faculty members and students are paired based on their research interests. During Phase A of the project, mentors provide protégés

counsel in the preparation of conference proposals and conference presentations at regional, state, and national levels.

### *C. Project Implementation.*

In order to engage students in scholarly activities, Project APPLE carries out six main activities:

*Recruitment.* Faculty members share the project's goals with students in their classes and promote APPLE as an optional opportunity for professional growth. Students are usually attracted to the project because of their interest in doing research, collaborating in academic projects with peers and faculty, preparing for graduate school, and enhancing their resumes through professional experiences. Other than the student's interest and commitment to the project, there are no conditions to become accepted as a participant. Teacher candidates interested in participating are then mentored outside their coursework requirements as to project specifics and completion of initial tasks. A directory is created with essential contact information of graduate and undergraduate recruits for the project, which includes students' areas of interest.

*Identification of areas of interest.* Faculty and participants are matched based on potential areas of interest. Faculty members help teacher candidates focus on specific topics (manageable units) for research that are related to their own personal interests and/or projects in their teacher education courses. These specific topics and projects become the focus of students' research. During the academic year, students generally devote around two hours a week to work on their projects and attend APPLE meetings.

*Links between research and practice.* Faculty and staff mentor teacher candidates on a one-on-one basis in using electronic databases to conduct research. Faculty members usually mentor an average of 3 students each semester with the help of staff running grant projects in the department. Teacher candidates evaluate the reviewed literature by questioning the extent to which their proposed projects are relevant to actual classroom practice and could be applied to real classroom settings. Participants are also encouraged to prepare their projects with a particular audience in mind – practitioners for grades K-12 who attend conferences in the field in search of best practices applicable to their daily work in the classroom.

*Proposal writing.* APPLE faculty and participants join efforts to produce high-quality conference proposals that emphasize practical applications derived from research on teaching and learning. In addition, participants look for and retrieve calls for proposals on-line, as well as write and submit proposals. Written proposals are initiated by the teacher candidates and revised by faculty as needed until the product is appropriate for submission.

*Enhancement of presentation skills.* The presentation delivery training available for APPLE participants includes instruction in PowerPoint formatted presentations. To ensure that teacher candidates are ready for their conference presentation, APPLE participants are screened by the project's Advisory Committee. The committee consists of three faculty members and two members of the staff who evaluate participants' presentation strengths and weaknesses using the project's evaluation materials for professional presentations. The evaluations focus on the participants' ability to introduce, present, and close their presentation, as well as engage and interact with the audience, create and use a professional PowerPoint presentation, and adhere to the time-frame.

*Publication preparation.* The purpose for Phase B of the project is that APPLE participants prepare publications on their areas of research based on the projects presented at professional conferences.

#### *D. Project Evaluation.*

Using qualitative methodology, an effort was made to evaluate APPLE's preliminary results by exploring students' perceptions of their engagement in the project. Semi-structured interviews (consisting of seven questions) were conducted with six program participants. The questionnaire items consisted of open-ended questions on participants' experiences, their perceptions of the project's features and effectiveness, and recommendations for improvement. The sample for the evaluation was an available pool of project participants (faculty mentors and students) working or attending classes on a full-time basis. Two faculty members and four undergraduate students supplied the data for this study. Following the transcription of the interviews, findings were analyzed using the constant comparative method (Lincoln and Guba, 1985; Merriam, 1998). Three main themes emerged from the study: students experienced increased confidence in giving professional presentations, they expressed strong interest in their continued involvement in APPLE, and also perceived benefits from the project beyond their newly acquired skills as presenters.

*First theme: Students experienced increased confidence in giving professional presentations.* Faculty-student mentoring and pre-conference screenings enabled students to prepare and produce professional presentations. After a meeting with her mentor, one program participant decided to present her work in her native language, Spanish. By realizing she could build on her strengths in her native language, this student became confident to perform her best in front of a group.

I prepared everything in English and they told me: "Why you don't do it in Spanish? Wow!, I said. So, of course you know it changed it all... and my concerns about my shyness were gone. I felt very confident [Speaking in Spanish] and I knew what I had to say, I knew what I had to do, I knew how to approach the people, how to get their attention, how to give my presentation a special appeal. I think I did a great job.

Nora, Undergraduate Student

[Note: All written quotes from participants have not been edited for spelling or grammar to preserve authenticity.]

Nora, a teacher candidate seeking a bilingual teacher certification became one of the strongest Spanish language presenters in the project, and her native language proficiency served as a model during presentations targeted to bilingual educators, minority language parents, and other Spanish speaking audiences.

Ana, another undergraduate student, recalled the practice and feedback her group received through the APPLE screening as beneficial to building the group's confidence and improving their presentation.

It was a lot of pressure...thinking you're going to present at a conference and don't know how to do it, having never done that before. [At the screening] you get to present in front of people you know, so you have more confidence and their feedback is honest feedback.

It helped us a lot. So, then the day we presented we were confident ourselves. People told us it was a good presentation.

Ana, Undergraduate Student

Another undergraduate student expressed how APPLE supported and encouraged her to progress from regional to national-level conferences.

There is such a great support and advice system, all of which is there for you to utilize to the full extent. As a student, it can be hard to know how to continue on and work toward more and higher goals, but they [APPLE staff and mentors] are there to help push you in the right direction to continue further... Naturally, you get a little nervous during the screenings but that is soon replaced by excitement at the conference presentations.

Nicole, Undergraduate Student

*Second theme: Participants expressed strong interest in future developments of Project APPLE.* When asked to offer suggestions for future project developments, the participants responded with enthusiasm regarding their interest in advanced technology training and participation in international conferences.

I think technology is a good tool to improve presentations and it's very good to know. I think I just need some more practice. I really love PowerPoint and I would like to incorporate multi-media and learn more advanced applications.

Carmen, Undergraduate Student

The more exposure we can give our students (nationally, internationally), the better. Factoring in an international component into the project would certainly be a plus. This would promote recruitment of new students... as well as give more visibility to our institution. Inter-institutional collaboration with universities abroad would be a dream come true.

APPLE Faculty Member

I think that international conferences would be really, really good. Personally, I would love to talk and work with others internationally, including going to and/or speaking at international conferences. What a better way to learn more viewpoints and perspectives, not to mention meet, learn from, and correspond with other professionals in your field.

Nicole, Undergraduate Student

*Third theme: Students perceived key benefits from the program beyond their newly acquired confidence as presenters.* When asked to add any information to the individual interviews conducted, participants responded with insightful comments on how the APPLE project engaged students in active and collaborative learning experiences, extended departmental visibility, and encouraged long-term professional development.

I have always been interested in higher leadership roles and activities, but have never known what direction or steps to take to do so. APPLE and its leaders break down those steps and guide you through so they don't feel intimidating and they actually feel within reach, even for an undergraduate student... I believe working with Project APPLE has helped me get to the professional level that is needed for these conventions and my hope is to go even further to the next levels. This project is about relationships, collaboration, and group work.

Nicole, Undergraduate Student

I think the program brings out the department of teacher education. This is a good project, so other people will see and be interested in it, and the university will shine because of this.

Clara, Undergraduate Student

I have become more excited about the idea of presenting at conferences and publishing. I believe this project could help other faculty members feel the same way. I love mentoring students, and helping them to start building their resumes. In doing so, I feel the urge to continue to build my own vita. I believe I have become a more productive scholar since I am involved in APPLE.

APPLE Faculty Advisor

*Evaluation summary.* Project APPLE was evaluated to identify participants' perceptions of their involvement in the project. The analysis of the interviews revealed three thematic findings. First, the faculty-student mentoring and pre-presentation screenings fostered students' confidence as presenters. Second, participants expressed their interest in future project developments concerning advanced technology training and conference presentations at international forums. Third, participants identified additional benefits of the project, which included expanded learning experiences through active and collaborative work, institutional visibility, and professional/scholarly motivation. The present study suggests that the preliminary outcomes of the program are directly in line with its goal. In addition, the findings from the evaluation indicate high levels of engagement by the student participants in the project. The confidence gained by students as conference presenters and their reported interest in growing with the project into its next phases (specifically, through training in advanced technology applications and international conferences) reveal participants' sense of empowerment and ownership within the project. In the following section, we outline recommended steps for teacher education programs interested in implementing a profession-enhancing project such as APPLE.

#### ***IV. Recommendations for Practice.***

This step-by-step "How To" section summarizes best practices we have identified while conducting the project, and may serve as a guide for the implementation of this unique professional enhancement program in other educational settings. Figure 1 shows a summary of this section in the form of a checklist with the steps to take in order to promote pre-service teacher involvement in presentations and publications.

**Figure 1. Professional Enhancement Project Checklist.**

<b>Professional Enhancement Project Checklist</b>	
<b>Phase A: Conference Presentations at Regional, State, and National Levels</b>	
<i>1. Preparing for the Project</i>	
<input type="checkbox"/> A. Create/define team to conduct program	<input type="checkbox"/> D. Organize tasks in timelines with deadlines
<input type="checkbox"/> B. Develop clear goals and objectives	<input type="checkbox"/> E. Appoint Advisory Committee
<input type="checkbox"/> C. Identify available resources to run the project	<input type="checkbox"/> F. Produce recruitment plan
	<input type="checkbox"/> G. Promote project

## 2. Training for the Conference

- |  |   |
|--|---|
| <input type="checkbox"/> A. Identify students' areas of interest                     | <input type="checkbox"/> F. Develop PowerPoint presentations                          |
| <input type="checkbox"/> B. Produce training materials based on individual needs     | <input type="checkbox"/> G. Develop conference evaluation forms                       |
| <input type="checkbox"/> C. Conduct literature reviews on specific areas of interest | <input type="checkbox"/> H. Screen and evaluate presentations with Advisory Committee |
| <input type="checkbox"/> D. Identify calls for proposals                             | <input type="checkbox"/> I. Integrate feedback and prepare final version              |
| <input type="checkbox"/> E. Prepare conference proposals                             |   |

## 3. Presenting at the Conference

- |  |  |
|--|--|
| <input type="checkbox"/> A. Go through conference logistics                                  | <input type="checkbox"/> C. Have presentations evaluated by the audience |
| <input type="checkbox"/> B. Organize presenters to observe/evaluate each other's performance |  |

## 4. Debriefing after the Conference

- |   |   |
|---|---|
| <input type="checkbox"/> A. Organize a meeting or a luncheon                | <input type="checkbox"/> D. Show presenters how to update their resumes                                     |
| <input type="checkbox"/> B. Give recognition to presenters                  | <input type="checkbox"/> E. Discuss project's next steps: next conference(s), timeline(s), and expectations |
| <input type="checkbox"/> C. Discuss presenters' experiences and evaluations |   |

### **Phase B: Publications**

## 5. Moving from Conference Presentations to Publications

- |   |  |
|---|--|
| <input type="checkbox"/> A. Identify possible forums for publication                  | <input type="checkbox"/> E. Submit manuscript according to publication guidelines      |
| <input type="checkbox"/> B. Study publication guidelines                              | <input type="checkbox"/> F. Acknowledge accomplishment and record in resumes and vitas |
| <input type="checkbox"/> C. Expand presentations into scholarly articles              | <input type="checkbox"/> G. Evaluate project and identify areas for improvement        |
| <input type="checkbox"/> D. Edit articles with participants until manuscript is ready |  |

### *A. First Step: Preparing for the Project.*

Clear goals and objectives anchored in the program, college, and university philosophies constitute the foundation of a project like APPLE. A team should be formed to run the project and monitor its development based on the stated goals and objectives. Also, members' roles should be defined and resources to run the project should be identified. Among these resources are funds for professional development activities available at the college or university level (i.e., student travel funds, and private, federal, or state program development grants). As well, the



APPLE concept can be integrated as a professional development/mentoring component into the design of many grant proposals for program development.

In preparing for the project, it is also important to establish timelines with deadlines to organize tasks. Among the key tasks to schedule are planning meetings, researching conference calls for proposals and guidelines, preparing conference proposals, and screening presentations. It is also important to appoint an Advisory Committee to govern and evaluate the project. This committee can be selected from faculty, department administrators, and student teacher representatives. Once the project's main components have been established, a plan for the recruitment of student participants should be devised. The plan should aim to recruit faculty members willing to promote the project in their classes as well as serve as mentors of teacher candidate participants.

### *B. Second Step: Training for the Conference.*

It is vital to produce training materials based on the needs of project participants. In developing these training materials, several themes to consider may include: identifying students' areas of interest, conducting literature reviews, preparing successful presentation proposals, developing effective PowerPoint presentations, delivering effective presentations, and listing conference presentations in resumes.

In preparing for conference presentations, four main activities deserve special attention, since they demand basic technical skills as well as considerable time and effort. The first activity is the preparation of literature reviews related to the student's chosen area of research. Students often need training, which involves the identification of research themes, use of electronic databases, and use of the American Psychological Association (APA) guidelines for writing. The second key activity is the preparation of successful conference proposals, which are the result of multiple edits by participants and mentors who exchange an average of six drafts before arriving at the final product. Teacher candidate participants and mentors often use the reviewing tools in Microsoft Word to track changes and edits to proposals and use email to exchange files in an expeditious manner. The third activity that deserves special attention is the development of PowerPoint presentations. A common misconception is that all college students can effortlessly create a PowerPoint presentation. However, this is not the case. In fact, we found that 60 percent of the students in our project reported a need for basic technical guidance in using technology to produce their presentations. As a result, three staff members with strong technical skills conducted training sessions on PowerPoint for project participants. It is recommended that in cases where students need technical guidance, training be individualized when possible and designed based on a needs assessment. The fourth activity that merits special attention is the participants' presentation screenings. Approximately three weeks before the conference, mentors and student participants screen each other's work in order to assess their skills as presenters, receive feedback from an audience, and refine their conference presentations.

### *C. Third Step: Presenting at the Conference.*

Prior to the day of the presentation, it is important to go through the presentation schedules and logistics with the teacher candidate presenters (i.e., building layouts, room assignments, and directions to the conference location). Also, the number in attendance to the presentation should be estimated so that each presenter is provided with a packet of evaluation

forms to hand out. Project participants often offer each other support by observing/evaluating each other's presentations. At the end of the presentations, presenters collect the evaluation forms from the attendees and deliver them to an Advisory Council member at the conference.

#### *D. Fourth Step: Debriefing after the Conference.*

A follow-up meeting with project participants, Advisory Council members, department administrators and possible student recruits is scheduled after the conference to present a short project review and give recognition to the students' achievements. This meeting may be planned as a luncheon and serves as an opportunity for presenters to debrief as well as share experiences and the results from presentation evaluations.

#### *E. Fifth Step: Linking Conference Presentation's Outcomes to Next Steps.*

The debriefing luncheon is a good opportunity to discuss the project's next steps. However, if an on-line interface such as Blackboard or WebCT is available, it may also serve as a viable on-going means of communication among project participants. In discussing the project's next steps, it may be helpful to address application and proposal guidelines for future conferences as participants move up to the next level of presenting (i.e. from regional to state, from state to national).

### **V. Conclusion.**

Institutions seeking to improve the quality of undergraduate education should consider ways to encourage higher levels of student engagement (Hu and Kuh, 2003; Hu, Kuh, and Gayles, 2007) since it is, perhaps, the best predictor of learning and personal development for college students. As the literature indicates, students in teacher preparation programs who have considerable firsthand experience in educationally meaningful pursuits tend to be more effective teachers after graduation because they learn more during college (Carini and Kuh, 2003). Thus, professional enhancement programs that encourage pre-service teachers' participation in scholarly activities may be a way to promote higher student engagement and support future teachers' effectiveness.

This article described APPLE's inception, development, and evaluation of the preliminary outcomes from its first phase. Three main findings related to student engagement surfaced from the project's evaluation: First, student participants reported increased confidence as presenters, especially thanks to faculty's mentorship and pre-presentation screenings. The mentor/protégé interaction played a significant role in the achievement of this outcome. This finding comports with literature indicating that undergraduate participation in research through collaboration with faculty members is deemed highly desirable and effective in promoting student engagement (Association of American Colleges and Universities, 2002; Hu and Kuh, 2007).

The second finding from the evaluation suggests another effect of student engagement: student participants expressed their interest in expanding the project internationally and training in more advanced applications of technology. This finding suggests participants' interest in scholarly activities abroad. It also confirms the idea that the use of information technology for educational purposes is linked to how today's college students engage in active and collaborative

learning (Nelson-Laird and Kuh, 2005). Thus, it can be expected that technology will continue to play a significant role in the retention of current project participants and the recruitment of new students.

The third finding from the project evaluation outlined three main benefits beyond students' newly acquired skills as presenters: expanded learning experiences through active collaboration, institutional visibility, as well as students' and faculty's professional motivation to further their scholarly work. Given these additional benefits, project participants may be likely to remain engaged in the scholarship of teaching and learning, therefore, developing dispositions for continuous learning and personal development (Carini, Kuh, and Klein, 2006; Shulman, 2002).

The results of this study are based on a small available sample where students outnumbered faculty mentors in the interviews. Future studies evaluating professional development programs such as APPLE should further explore effects on student engagement by incorporating objective productivity indicators (i.e., participants' number of conference presentations and publications per year, as well as results from evaluations on presenters' performance at conferences). In addition, further studies should explore mentors' perceptions of their roles in this kind of professional development programs, along with the extent to which the project impacts mentors' scholarly productivity.

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