

School-to-Work Impact in Georgia Schools Planning and Organizing Educator in Industry Programs

Findings from the Georgia School-To-Work Project

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Overview of the Study

Since the enactment of the federal School to Work Opportunities Act in 1994, programs linking educator professional development to experiences in the workplace and community have been an important means of introducing educators to requirements of employers and helping them to make the connections between schooling and work. A variety of educator-in-industry programs have been developed by local School-to-Work (STW) partnerships in Georgia in the past four years, including job shadowing, worksite visits and tours, internships/externships, and field-based interviews with employers.

The purpose of this study was to identify the various types of educator-in-industry (EII) activities implemented through Georgia STW and to examine the organization and outcomes of this structured workplace learning experience for educators.

Survey data were collected from four key participant groups: (1) Teacher participants in EII activities, (2) counselor/administrator participants in EII activities, (3) employers hosting EII activities for educators, and (4) coordinators of local STW partnerships offering EII programs

A separate questionnaire for each of the four participant groups was developed and administered by the Occupational Research Group during spring of 2004, using email and paper distribution of surveys to participants through the local partnership coordinators. Completed questionnaires were received from 196 teachers, 19 counselors/administrators, 67 employers, and 19 local partnership coordinators. These respondents represented 24 of Georgia's 40 local STW partnerships. Information from participants covered a four year time period (2000-2004).

This report presents a summary of the survey data, focusing on what was learned about the planning and organization of EII activities in Georgia. Survey respondents are a self-selected sample; therefore, the results reported in this report should not be generalized to all EII programs or participants.

Summary of Key Findings

What did we learn about EII – its organization, structure, participation, and results?

Structure of the EII

Literature on how to design teacher workplace learning programs, based on most effective practices, stressed the importance of including four components in the experience: (1) an action plan for translating the experience into educational practice, (2) a pre-internship orientation, (3) an experiential component, and (4) connecting activities such as reflective seminars following the time in industry (Sargent & Ettinger, 1998; Center on Education and Work, 2001).

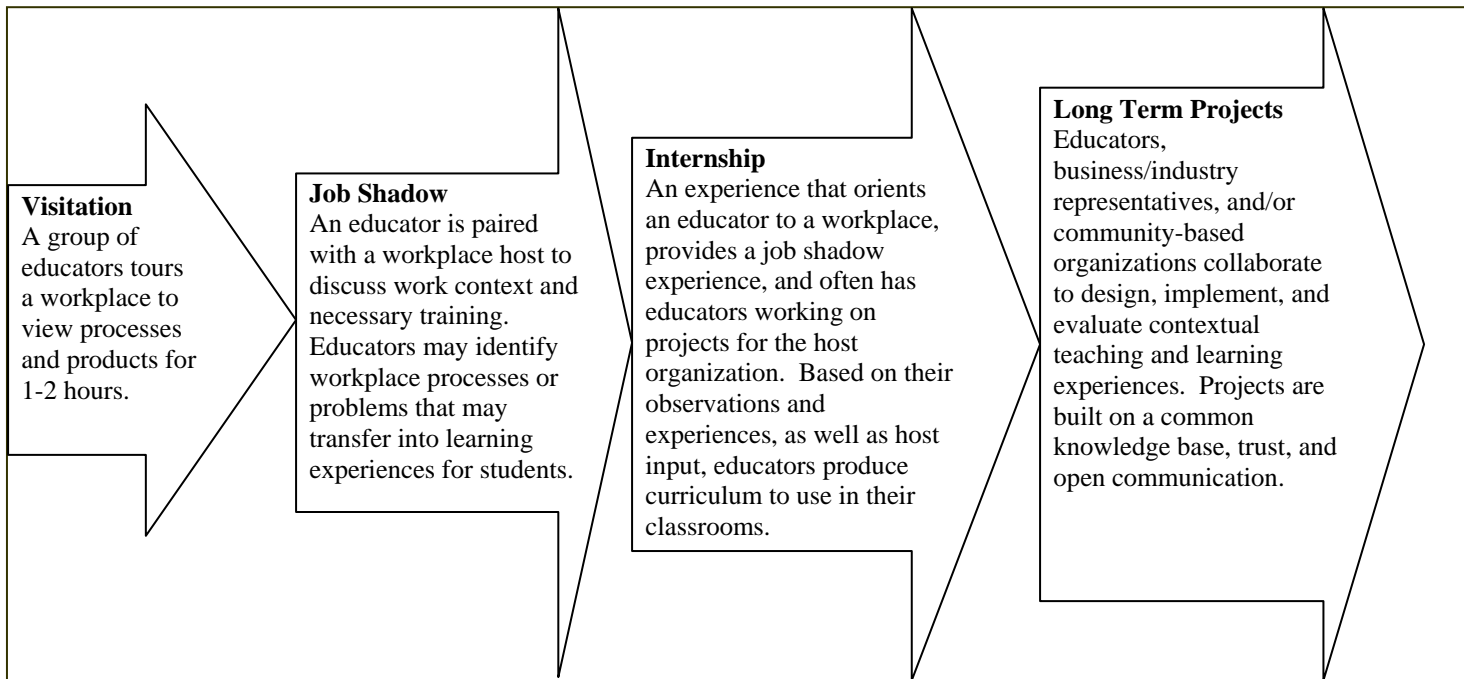
EII participants in the Georgia study were asked to identify time spent on pre-site, on-site, and post-site EII activities and to provide examples of these activities. Responses indicated that many EII activities occurred simultaneously (e.g., an orientation as part of the on-site experience) rather than in a sequence of before, during, and after the on-site experiences, and that the time spent on each activity varied widely. There does appear to have been some attempt to establish expectations about the EII in advance, as well as structuring activities after the industry experience that required participants to present information to colleagues, meet with employer participants as a group, or produce instructional materials to apply what was learned.

Opportunities for participants to reflect on their experience as a group and to discuss how to connect workplace learning with teaching or other student activities did not appear to be a large part of the EII programs. Most participants were required to submit reports, and this may have structured some individual reflection on what was learned and how it applied to students. Most of the literature on reflective practice indicates that the opportunity to reflect on experience is critical to the process of internalizing and acting upon what was learned, making sense of it, and relating it to prior knowledge and experiences. This aspect of EII appears to need additional focus by those planning EII in the future to facilitate outcomes from this experiential learning.

Defining EII

One important issue that emerged from our attempts to analyze the survey data based on type of EII experience was the difficulty of categorizing this type of professional development based on existing definitions of EII. Participant selection of pre-defined EII categories in the survey to describe their workplace experiences was

frequently inconsistent with the information provided later in the survey about specific EII activities. Survey respondents also had difficulty fitting their experiences into the categories, and most selected more than one category to describe their EII activities.



We initially drew from the literature about teachers in industry and work-based learning to describe the various categories of experience for educators in workplace settings. This included defining and labeling the activities using conventional terms like “job shadowing,” “internships,” or “industry tours.” Each of these categories seemed to be distinguished by the differing lengths of time spent in an industry site and the types of activities completed by participants. What we found was that the definitions we provided for EII participants to choose from in the study were overlapping (at least in the perceptions of the survey respondents) and not mutually exclusive. How EII program planners and participants actually designed and carried out EII experiences did not fit neatly into the boxes we provided to describe these experiences.

In the surveys, we found that participants who selected one category of EII actually described activities that fit into other categories as well; and, in some cases, the researcher actually chose to re-categorize responses for greater consistency, based on these more detailed descriptions of what actually occurred on the EII experience. The inconsistent interpretation by participants about what was a tour versus a field interview, for example, complicated our ability to analyze the information in the study. We had hoped to compare responses of EII participants in each of the four pre-

defined categories to determine if they differed on selected outcomes or other variables. Instead, we found that many participants selected more than one category and our own analysis of detailed information they provided indicated that activities could be classified as fitting into several of the EII categories.

Re-conceptualizing the EII categories

A clearer understanding is needed of how EII experiences are designed, what actually occurs in terms of participant interaction and involvement on-site, and the way participants describe their experiences. There are at least four factors that seem to determine the nature of the EII experience and which should be used in conceptualizing and describing this type of professional development. One variable is the amount of time actually spent on-site in industry. Another is the type and extent of interaction between educators and industry workers. A third is the work-related tasks or activities that are completed by the educator on-site and how these are determined. A fourth is the application of the knowledge/info/skills from the EII experience. Rather than a linear, one-way continuum of EII experiences, each variable – time, interaction, tasks, application/outcomes – has its own continuum and categories that define it, and the unique combination of these factors serve to define the EII experience for the participant.

Time for the EII is the amount of time the educator spends in the industry site carrying out some activity. It can vary from several hours to several days to several weeks. We tried to capture this information by asking EII participants how many hours they had spent on-site during their EII experience. It is also important to note that the EII experience includes more than the time in the worksite itself. Pre-site activities such as orientations as well as post-site activities such as integration of learning into instruction, presentations, or reports are also part of the time involved with EII.

Interactions in EII refer to the type of relationship and conversation that occurs between educators and the industry employees. This might be a group of educators listening to talks by employers or workers, observations of tasks occurring in the workplace, individual informal discussions with workers, formal interviews with industry employees, or ongoing discussion as part of the educator performing tasks in the workplace. Interactions may be with only one person, with several persons, or with many different persons in the worksite during the EII experience. The interactions can last a short time or long time, and can be one-time events or repeated, multiple interactions with the same or different individuals.

Tasks in EII refer to the activities that are carried out by educators as part of their experience in the worksite. In addition to interacting with industry employees, the educators may be working on actual projects or completing assignments for the business as part of their EII experience. This would be the most intensive level of experience, involving hands-on activities and tasks expected of other workers in the industry, and resulting in contribution to a product or service for the business. At the other end, educators may be asked by the EII program coordinators to conduct activities such as identifying processes, collecting materials, taking notes, or describing aspects of work or workers in the industry site during the EII experience. These do not relate directly to the work of the business itself, but are activities completed by educator participants as a data collection task to contribute to their overall learning.

Applications/outcomes in EII refer to how the experience is used by educators, specifically how it is translated into education practices like teaching or counseling students. The application may be a product such as lesson plans or instructional materials, or may be a process such as a presentation to colleagues or advising students. The results of EII programs depend upon expectations and requirements established by EII program organizers and vary from highly proscribed and structured products to less concrete outcomes such as increased understanding of connections between work and schooling. Applications also vary depending upon the professional role of the participant (teacher at the elementary, middle school, high school, or

postsecondary level; counselor; or administrator), their area of teaching, and the level of students.

Did the type of EII make a difference in outcomes reported by participants?

Within the restrictions of the categorization challenges described above, some analysis of the data by type of EII activity was conducted, and it did produce some interesting preliminary results. Nearly half of the teacher respondents reported that they had participated in only one category of EII, either internship, job shadowing, or tours of industry, in contrast to a mixture of these activities or more than one EII experience. By focusing on the sub-sample of single experience EII participants, a clear pattern of responses from these teachers on the outcomes of EII indicated that those who participated in internships reported more positive outcomes (higher means on survey items) than those who participated in tours or in job shadowing for all 10 areas queried on the survey, with one exception. The only item where tour participants rated an item higher than internship participants was on gaining a better understanding about technical college options for students. In this case, we believe that tours were more often part of the Tech Prep Summer Educator Academies which were held at technical colleges and included a stronger emphasis on postsecondary education transitions because of its relation to Tech Prep.

EII teachers who participated only in job shadowing activities reported the lowest ratings for all of the ten outcome statements on the survey. This suggests that a more intensive or extensive EII experience such as an internship — i.e., an EII experience with more time, interactions, tasks, and applications/outcomes — may be related to positive outcomes in career/job information, business/industry involvement, and applications to teaching.

Summary of what we learned

- In structuring EII experiences, those that provide more time and greater work involvement, such as an internship on long-term project seem to result in more positive participant outcomes in career/job information, business/industry involvement, and applications to teaching.
- Providing financial stipends (i.e., ~ \$300 - \$500 range) for participants was an important incentive for less than half; others said they would have participated without it.
- Most common reason for employer participation in EII was the chance to help educators understand employment opportunities and skills needed by workers so they could better prepare students to be successful in future jobs and careers.
- Most EII programs attempted to establish expectations in advance for educators and

employers, but there were few opportunities after EII activities for participants to reflect on their experiences as a group and how to connect workplace learning with teaching or other student-related activities. This aspect of EII appears to need additional focus by those planning EII in the future to facilitate the outcomes from experiential learning.

- Existing EII definitions and categories from the literature on work-based learning are insufficient to describe and analyze educators' work site learning experiences. A clearer understanding is needed of goals and objectives, how EII experiences are designed, what actually occurs in terms of participant interaction and involvement on-site, and the way participants describe their experiences. At least four factors seem to determine the nature of the EII experience and should be used in conceptualizing and describing this type of professional development:
 - the amount of time actually spent on-site in industry,
 - the type and extent of interaction between educators and industry workers,
 - the work-related tasks or activities that are completed by the educator on-site and how these are determined, and
 - the application of the knowledge/information/skills gained from the EII experience.

Rather than the linear, one-way continuum of EII experiences in current literature, each variable – time, interaction, tasks, applications/outcomes – should have its own continuum and categories that define it, using a matrix model. The unique combination of these factors will better define the EII experience.

What Makes it Work

Throughout the study, a number of themes emerged as significant success factors in the planning and organization of EII programs to ensure a greater impact on participants and ultimately on students.

Collaboration with employers

Not surprisingly, partnerships formed between STW, Tech Prep, and Youth Apprenticeship coordinators and business/industry representatives, chambers of commerce, and other community partners were critical to the success of EII programs. Finding sites for EII activities, obtaining the cooperation of employers, and clarifying expectations for EII participation required contacts with local business representatives to establish the locations and involve key personnel. This was done in most cases by the STW coordinators, except where EII participants were asked to identify an employer site for their visit or internship and set individual goals for the EII.

Organization and relevance

Meeting needs of both educators and employers is important in organizing EII programs. The amount of time spent on-site in industry and the various activities completed by participants varied widely in our survey responses, which seems to indicate that there is no standard model for how EII programs are structured and that activities are adapted to the needs of educator and employer participants. However, some employers thought that the educators did not spend enough time in the workplace to really get involved with the workings of the business, and others had trouble scheduling work around the time when EII participants could be present in the work site. For internships, producing outcomes or products of value to the employer was an important consideration. More information is needed about how the intensive internship programs differed from the short-term tours and visits to work sites, and how each should be organized to maximize relevance and impact for all participants. However, findings from this study indicate that internships and longer-term projects with industry result in greater and more profound educational outcomes.

Timing

The timing of the EII experience is important to participation. Conducting programs in the summer makes it easier for teachers to participate due to restrictions on release of teachers and other school personnel during the academic year and the other demands on their time when school is in session. Connecting industry visits to other teacher/counselor development summer activities or workshops was used successfully by a number of partnerships.

Using what is learned

Structuring ways for participants to integrate EII learning into day-to-day teaching and other responsibilities is critical to ensure impact of EII experiences. This includes translating knowledge into daily lesson plans, curriculum content, teaching methods, instructional materials, and student work-based learning opportunities. Most EII programs had requirements for participants to keep journals, produce materials, use information in teaching, or share their experience with colleagues.

Further Information

This brief has been prepared by the Occupational Research Group in the College of Education at the University of Georgia, under contract with the Georgia Department of Technical and Adult Education, Office of School-to-Work. Principal Investigator on the STW evaluation and assessment project at UGA is Richard L. Lynch. The content of this brief has been extracted from the report: *Assessment of School-to-Work in Georgia: Educators in Industry (EII)*, by Dorothy Harnish, Jana Thompson, and Grace Thornton, March 2005 (www.coe.uga.edu/ORG). Further information about STW in Georgia may be obtained at <http://www.dtae.org/gastw>.