

Chapter 10:

Student Voices through Researching and Promoting Learner Autonomy¹

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Introduction

In this chapter we offer information and examples from an internal SoTL small grant program—one function of which is to offer a way to hear student voices in teaching, learning, and SoTL. We begin by briefly summarizing the history and current status of the grant program and the place of student voices and learner autonomy in that program. Next, we present an overview of four of the projects including findings on learner autonomy and the roles of students. The third section of the chapter lays out the themes or patterns that emerged from interviews with faculty and student members of the small grant research teams about both learner autonomy and student voices. Finally, we conclude with some advice for others interested in promoting learner autonomy and inviting students into SoTL as research collaborators.

A Brief History of the Illinois State University SoTL Grant Program

At Illinois State University, as in many institutions of higher education, we offer small grants for conducting SoTL research (McKinney, 2007a). Our SoTL grant program began in the late 1990s and was originally very general in terms of grant topics and eligibility requirements. Over time, the program developed and changes in the guidelines have been used to obtain submissions that fit institutional priorities in our SoTL work. These priorities have included obtaining student voices in SoTL and promoting learner autonomy.

We began these changes in the grant program by first moving from a broad view of SoTL that included SoTL research, scholarly teaching, and teaching improvement or techniques to a

more refined view of SoTL as “the systematic study/reflection of teaching and learning made public” (Illinois State University, 2009b). Members of the University community adopted this formal definition in 1998. We continue to support scholarly teaching and teaching improvement projects where some form of data, broadly defined, is not obtained and/or not made public with other funds. Secondly, early on, we made the decision to move from individual grants to small team grants requiring, depending on the year and our objectives, a colleague from another discipline, a colleague from the same discipline/department, and/or an undergraduate or graduate student on each research team. Two specific changes in the grant requirements over time are relevant to this chapter: 1. the required inclusion of student researchers on all grant teams and 2. the requirement in recent years that the topic of the SoTL work be about promoting learner autonomy (broadly defined, see below).

The former change, requiring student members, began long before Illinois State University became involved in the most recent three-year CASTL institutional initiative where we are members of the themed group on Student Voices in SoTL. Given our University’s strategic plan, we believe that students should be involved in SoTL work and that we should partner with students to study teaching and learning. Parts of the goals in our strategic plan include that we work “with students as partners in their educational development inside and outside of the classroom, so that students come to appreciate learning as an active and lifelong process” and we focus “on each student as an individual, with unique educational needs and potential. The University is dedicated to placing the learner at the center of teaching and scholarship...” and we prepare “students to be informed and engaged citizens who will promote and further the collective goals of society. The University promotes active learning experiences

through which students will gain an awareness and understanding of civic engagement as a lifelong responsibility” (Illinois State University, 2009a).

One way to involve students in SoTL has been to have students as active research partners in our internally funded SoTL grant program. In an earlier three-year CASTL institutional initiative, Illinois State was the lead institution in a cluster of eleven schools working on supporting SoTL at the campus level. Part of this earlier initiative also involved efforts on the various campuses to include student voices in SoTL including but extending beyond students as research subjects.

We also began the internal SoTL grant program by leaving the topics or teaching problems addressed in the studies open. Later, we required that topics link explicitly to any of the values or actions in our institutional strategic plan. Then, a few years ago, we made the decision to focus the grants on promoting learner autonomy. The reasons for this change included faculty concern (expressed in teaching workshops and other settings) about low levels of learner autonomy demonstrated by our students, goals in our strategic plan that were connected to the construct of learner autonomy (as noted before), and some potential international connections related to SoTL work on learner autonomy. For definitions and a bibliography related to learner autonomy, see <http://www.sotl.ilstu.edu/castlAahe/autoWeb.shtml>. The language about learner autonomy used on the call for proposals read as follows:

For FY07, projects must focus on the topic (broadly defined) of promoting learner autonomy. Autonomous learners are students who take responsibility for their learning, are willing to collaborate, partnering with faculty and peers in their learning, are reflective about their learning, and are involved in shared governance. Autonomous learners are strong life-long learners.

Thus investigators sought student voices in at least two ways via this grant program: 1. Students are, most often, the research participants in the studies. 2. All studies involve one or more undergraduate or graduate students as co-researchers. Some grants also engaged student voices by inviting students to serve as pretest or pilot participants, as validity checkers of qualitative data, as attendees who could respond to the studies in local presentation situations, or as members of classes where faculty shared SoTL results and how they would like to apply them in that class.

We believed there would be a connection between student voices and promoting learner autonomy. That is, it was our hope that the research results would prove useful in enhancing the learning autonomy of students across campus and, perhaps, their ability and willingness to voice their ideas on teaching and learning. In addition, we believed that the students serving as co-researchers on the grants would become more autonomous learners both from the experience of serving as a co-researcher and from what they learned about learner autonomy.

Examples of Learner Autonomy Studies from the SoTL Small Grant Program

The use of a broad definition of learner autonomy has facilitated incorporation of the concept into grant recipients' work in disciplines as diverse as agriculture, anthropology, business, construction management, criminal justice, education, health sciences, and psychology. These fields offered uniquely enriched opportunities for learner autonomy and expression of student voices. In this section, we discuss four recent SoTL small grant recipients' research projects emphasizing the objectives of the studies, their methods for exploring learner autonomy, key results, and types/examples of student voices. While recent SoTL small grant funding opportunities have resulted in a number of studies worthy of report, we selected these for the diversity of discipline, content and method, as well as for the variety of ways they express

student voices. The works identified and discussed below have been summarized from project profiles available at the Illinois State University SoTL website,

<http://www.sotl.ilstu.edu/castlAahe/autoWeb.shtml>.

Agriculture Applied Science Application

The first project involved a six-person research team: two faculty members and four students from the Department of Agriculture. The overarching theme of the project was to examine autonomous learning techniques employed in an applied science curriculum. More specifically, the researchers sought to facilitate learner autonomy by creating an opportunity for students to link discipline-based theory to practice through real world application. The future of the field of agriculture is largely dependent on educating and maintaining qualified and trained individuals in the industry, many of whom have no prior agriculture or farming experience, so practical application is key.

The project consisted of training a sample of students to be quality evaluators of food animal products (e.g., pork loin) and testing their application of the gained knowledge and skills. Undergraduate students enrolled in two courses, Foods of Animal Origin and Introduction to Meat Science, voluntarily participated in a study using an experimental design to examine visually the quality of pork loins treated with natural antioxidants. Researchers drew 46 students from both classes and randomly divided into control and experimental groups.

The control group received in-class information and instruction about meat quality as part of the standard course curriculum. The experimental group received both the in-class information and instruction as well as completed a hands-on laboratory component to provide practical experience. Both groups completed a pre-test involving the subjective analysis of pork loins after a specific number of days of refrigeration. Investigators used Likert scale responses to rate the

color, firmness, and marbling of the meat. Upon completion of the course material addressing meat quality, both groups completed a post-test meat quality assessment. The intent of the exercise was to encourage students in the experimental group to self-educate by drawing on the hands-on training opportunities in which they had participated and the additional practical experiential knowledge they had gained.

Faculty were using the practical hands-on lab training component of the course as a model for inclusion in the curriculum that would enhance self-directed student learning using real-world application in meat science. Despite statistical results showing no significant effect of treatment between the pre and post-test, the researchers remain optimistic that hands-on training integrated into the curriculum via the lab component of the course and based on a strong theoretical rationale should promote learner autonomy.

The *student voices in this project* came into play via both the student researchers working on the funded SoTL project and by the students engaged as study participants in the research. Student researchers had an opportunity to gain experience working on several tasks (e.g., developing and setting up experimental stimuli, observing outcomes, interpreting data) with faculty serving as mentors. Student participants were able to inform efforts to enhance and improve curriculum through their willingness to serve as research subjects. The feedback received from participants has influenced discussions about the future direction of curriculum and instruction in the Department of Agriculture.

Active Learning in Criminal Justice Research Methods

The second SoTL small grant funded project discussed here involved a three-person research team, two faculty members and one student from the Department of Criminal Justice Sciences. The team explored the use of active learning techniques and the research project model

(utilizing a student-driven, real-world research project to address a problem salient to the campus community) to facilitate learner autonomy and the teaching of social science research methods courses in criminal justice.

More specifically, the project assessed how the implementation of tiered assignments and the incorporation of the research project model impacted students' attitudes towards the course, perceived competencies across an array of research oriented skills, and perceived relevance and importance of research methodology in students' everyday lives using pre and post-test data collection. The in-class project accentuated what Littlewood (1999) refers to as reactive autonomy—autonomy that does not create its own direction, but, once the direction has been initiated, can enable learners to organize their resources autonomously to reach the end goal.

A total of 67 students from four sections of Criminal Justice Research Methods courses participated in both the pre and post-test assessments, linked through unidentifiable codenames. The pre- and post-test questionnaires sought to measure several key concepts: 1. motivation level/attitude toward active learning/learner autonomy; 2. skill level as it applies to seeking new information and becoming a lifelong learner; and 3. perceived skill level and ability to apply information taught as part of the class. The questionnaire concluded with open-ended feedback questions.

In part, the researchers hypothesized that students exposed to this method of learning would have more favorable attitudes toward conducting research and using active learning skills. They further hypothesized that students would increase their autonomous learning skills (seeking new information, developing critical thinking skills, and applying new information), providing a framework for lifelong learning.

The results of the complete statistical analysis revealed several significant and informative findings. Student interest in research methods improved significantly from the pre- to the post-test and

engaging in hands-on activities as their preferred method of learning increased significantly from the pre- to the post-test while studying by themselves significantly decreased. Students also revealed that they are significantly more likely to regard published research and cited research skeptically than before they took the course and participated in the research project. Students also felt significantly more confident in their own abilities to conduct a small research project if requested by an employer. They were also significantly more cognizant of the impact research findings have on their lives and significantly more confident in the ability to discern scholarly research sources from non-scholarly sources.

Student voices in this project emerged, in part, by the student researcher who assisted with developing the tiered assignments, instructing the student participants about how to undertake each assignment, and conducting analysis and interpretation of the pre- and post-test assessment data. The student research participants in the project were able to express themselves on several occasions via the various data gathering strategies. Their responses had a direct impact on course instruction and in developing curriculum for future course offerings.

POGIL and Clickers in Health Sciences

A three-person team, two faculty members and one student from the Department of Health Sciences, conducted the third small grant funded project discussed here. They designed the project to evaluate the use of two specific learning modules out of a total of 26 modules in a general education course on environmental science. The two modules were to promote learner autonomy in the course using Process-Oriented Guided-Inquiry Learning (POGIL) with a student classroom response system known as “clickers.” They expected that POGIL and clickers together would increase learner autonomy by creating a student-centered, discovery-based learning experience in the classroom.

The two POGIL learning modules implemented in the course addressed pesticides and biodiesel. Both sessions were hands-on interactive activities for the students taking the class. The pesticide module used hands-on simulations while the biodiesel module used a series of laboratory demonstrations. Classroom clickers allowed students opportunities for input into each demonstration and experiential learning component associated with the modules.

The researchers then sought to examine the impact of the POGIL modules on students' learner autonomy. Students in several sections of the course (sample size ranged from 58 to 161 students) participated in the assessment, which involved comparing quiz scores following POGIL units of the course and non-POGIL units of the course. The researchers hypothesized that students exposed to POGIL modules would be more likely to engage in the topic and self study resulting in better quiz performance. Results suggested that student performance did increase after POGIL exposure. Students' exam scores on questions addressed by the POGIL exercise were also compared to previous sections of the course prior to the incorporation of POGIL in the course curriculum and the results were similar though not statistically significant. The researchers also sought student feedback on the POGIL sessions through anonymous clicker responses recorded for two questions addressing the helpfulness of the hands-on pesticide and biodiesel modules. On a Likert scale ranging from strongly agree to strongly disagree, students responded positively to both modules.

While not all the results were significant, the authors note that POGIL appears to show promise in large lecture hall settings for promoting learner autonomy. The student co-researcher who worked on many research tasks expressed *student voices in this project* by assisting in developing the two POGIL modules (brainstorming ideas, pre-testing the modules), assisting in implementation of the two POGIL modules-- particularly for the biodiesel POGIL module where

experiments are involved, and conducting class observation as a qualitative measure of the effectiveness of the modules. This student has also gone on to present and publish work related to aspects of this SoTL funded research, some of which received an award in recognition of the work. In addition, the student participants enrolled in the courses with POGIL modules provided feedback on the experience and helped inform and enhance the learning experience for future students.

Teacher Immediacy, Learner Autonomy, and Student Achievement

The fourth and final SoTL small grant funded project which we summarize here involved a three-person research team, two faculty members and one student from the Psychology Department. The project explored learner autonomy and student achievement motivation as a function of teacher immediacy and student attachment. More specifically, the work sought to identify variables in the student-instructor relationship that predicted the quality of that relationship and subsequent student achievement and learner autonomy. The researchers noted that self-directed students reported stronger supportive relationships with instructors. Therefore, identifying which variables might predict these supportive relationships with instructors is important. The researchers emphasized the connection between teacher immediacy—verbal and nonverbal behaviors and cues exhibited by instructors in the classroom that serve to foster positive student-instructor relationships—and student achievement and autonomy.

Two-hundred sixty-three full-time college students ranging in age from 18 to 22 years old completed a series of questionnaires. The questionnaires assessed generalized attachment functioning or attachment security, verbal and non-verbal teacher immediacy, and student-instructor relationship (high or low levels of connectedness with and anxiety towards the

instructor). The measured aspects of autonomy included perceptions of confidence and control, and self-directed learning.

The results included a finding that student gender did not appear to impact the quality of the student-instructor relationship with both males and females equally likely to form positive relationships with strong connectedness and low levels of anxiety. Further, a student's attachment security did not appear to improve or impede their relationship quality with their instructor. In addition, the verbal and nonverbal teacher immediacy scales predicted different components of the student-instructor relationship with high verbal immediacy related to high ratings of student-instructor connectedness and high nonverbal immediacy related to lower perceptions of relationship anxiety between student and instructor. Finally, students' achievement motivation and autonomy were predicted by their instructor's immediacy behavior, though this was only the case when the student also felt a strong relationship connection to the instructor and had low levels of perceived relationship anxiety.

The research in large part supports the theoretical foundations of the study. Autonomous self-directed student learners reported strong and supportive relationships with their instructors. The researchers identified several salient characteristics that serve to develop and strengthen that supportive instructor-student relationship. Both verbal and nonverbal immediacy foster feelings and impressions of student-instructor connectedness, which in turn relate to student confidence, control, and self-directed autonomous learning. *Student voices in this research* were expressed by the student researcher who assisted with the data collection and interpretation and has gone on to continue working with the instructors. The student participants, those enrolled in the courses where the questionnaires were completed, provided insightful information in to the teaching and

learning dynamic of the classroom and helped to examine what, to this point, had been largely a theoretical discussion.

Results from Interviews with Student and Faculty Members of the SoTL Grant Program Research Teams

Using different questions for student and faculty team members, we conducted face-to-face interviews with faculty and student researchers. Our main focus was on the experiences and outcomes of the students working on these projects from both the faculty and student points of view. After multiple attempts to contact all those involved, we were able to interview eighteen individuals--six students and twelve faculty--gathering data on eleven of the thirteen grants awarded over the three years in question, 2005-2006, 2006-2007, and 2007-2008. Our student co-author interviewed the six students, and two of the faculty co-authors split the task of meeting with and interviewing the faculty. For all six student interviews we have feedback from at least one faculty member from those students' teams. Interviewers took detailed notes during the interviews, then reviewed and added to those notes immediately following each interview. Given time constraints, we interviewed grantees from 2007-2008 before they had all their results in place and before they were able to follow through with presentation and publication efforts. Nevertheless, we believe the findings from those interviews are compatible with those from the two previous years.

All but one faculty member were appreciative to have had student collaborators; one faculty member acknowledged that he/she added a student initially only because the SoTL grant application mandated there be a student on the team. This faculty member remained uncertain about the benefits of the student co-researcher to the student or the project. Faculty recruited student collaborators in ways that are not surprising. They tapped both undergraduate students

and graduate assistants that they knew and trusted, and thought might have an interest in the project. Faculty tended to favor students who had completed the classes that were to be the focus of the learner autonomy research. Beyond their student collaborators, faculty also needed students as research participants. Subject pools ranged from general education classes to doctoral students. Though in most cases students could opt to participate in or abstain from the activity or data gathering, in some cases students had to participate for learning and informal assessment. In all cases, however, investigators were to obtain Institutional Review Board (IRB) approval in order to use any data in a SoTL project that would go public.

Overall, the students and faculty were positive about the outcomes of their research partnerships focusing on learner autonomy. All the interviewed students relished the chance to be a vital part of a real research endeavor. Student collaborators learned by performing a number of important research steps. Although the project ideas were initially the province of the faculty, most faculty members invited these students very early in the process to help think of ways to measure learner autonomy via a classroom project and to assist with the writing of the proposal leading up to proposal submission. Some student collaborators were the sole student assistant on the project, while others were part of a student team working with faculty. Student tasks performed during the projects varied widely. Examples of tasks performed included researching best practices for whatever the project involved, acquiring items needed in class (such as used cooking oil), setting up in-class experiments, collecting data in class from student research subjects by means of questionnaires or observation, coding the results, thinking about what it all meant regarding advancement of learner autonomy of classroom students, and co-presenting and co-publishing the results for wider audiences. One student collaborator used the grant project as the basis of her master's thesis and another for her undergraduate thesis.

Student voices came through loudly and clearly as faculty turned to their student colleagues for advice and innovative ways of doing the research. Faculty were fulsome in their praise of collaborating students when we asked for actual examples of contributions the students made, useful ideas that faculty either did not think of or things faculty could not have done on their own. And, as one student stated, “collaboration was the best part of the experience” because it included “pulling on each other’s strengths.” Some of the projects involved questionnaires and students helped immensely with questionnaire preparation. In one project the student co-researcher suggested they ask whether students thought it mattered if a professor spoke with an accent or whether he/she made them feel more comfortable in class by offering extra credit assignments. Another project’s student voice came to the forefront after they piloted the questions. The student, thinking as a student, told the professor that they had to change the wording of some questions because students would misinterpret what they were seeking. When it came time for administering those questions to the students, the student colleague did all the interviews. Looking back, the student’s professor admitted that she could never have gotten her students to open up in the way that their peer was able to do. A third grant involved a semester-long, class-wide research project, with sequenced sub-assignments. The student collaborator had taken the class before and was able to provide “unique insights about how the assignments would be received by students in the class and how challenging they were.” Finally, the student who collaborated on a classroom demonstration project proved to be invaluable, as she developed a checklist of items needed to conduct the demonstration, created a molecular model from ordinary items around her home (like foam insulation and pool toys) that instructors could show and then rearrange in front of the class, and envisioned and performed an observation of students while demonstrations were proceeding.

We also tried to ascertain what benefits the collaborating students received from their participation (see also McKinney, Jarvis, Creasey & Herrmann, this volume for benefits and challenges to student voices in SoTL research). To learn about such takeaways, we queried both the students themselves and the faculty who partnered with them on the projects. In general, the responses were similar; but students had more to say on the subject than did the faculty. Both pointed out the value to the student of doing the research in the company of persons who have research experience. Students felt uniformly that they became better researchers in the process. Some credited their project with either propelling them to the next stage in their lives (e.g., graduate school) or planting the idea that graduate school or a teaching career ought to be something for them to consider. A nontraditional (over the age of 25) female student said she used to be the sort of undergraduate who sat in class, took notes, and tried to be invisible. Following her participation as the sole student collaborator on her learner autonomy project, she now strives to involve herself in class and, as a result, feels “more confident.” Students and faculty applauded the fact that several of these students were able to present results of the research at professional meetings, including some at distant venues.

Given that learner autonomy played a key role in the projects during these three SoTL grant years, our student co-author probed deeper with her student interviews, asking whether “this learner autonomy project altered your views on the ways you approach learning.” Of all the questions on the student survey, this one elicited the most commentary. Interviewees spoke of now needing less faculty direction on research projects, of gaining a major measure of academic independence after the success of the learner-autonomy project, of being better prepared for graduate school than other members of their cohort, of managing time more efficiently, and of seeing how mistakes made can lead to better ways of doing research the next time. One young

woman, now in graduate school but then an undergraduate, was able to serve as “an author on multiple convention papers along with the grant project” and took the opportunity “to go to UNLV to present the project to other schools.” She still cherishes the “professional relationships” she was able to forge with these faculty mentors at Illinois State. In the words of another student researcher, he “became an autonomous learner by doing so much [on the project]” by himself. He was able to “learn from past mistakes” and now “definitely” functions more autonomously as a graduate student.

Are the learner-autonomy projects altering the classroom landscape at Illinois State? We asked the faculty members what they are changing and whether their departmental colleagues are adopting new practices, based on grantee experiences. In the case of grantee classrooms and related instructional practices, the answer is a resounding yes. They now know better when to add and when to subtract from course content or approaches. For example, a project that brought dynamic demonstrations to the classroom will likely lead to more of this sort of teaching practice for this pair of instructors. Another team sees implications in their classes and perhaps a change in the way their department assesses learning outcomes for its matriculated majors. For the most part, on the other hand, grantees felt their department colleagues have not shown much interest in the project outcomes. Sometimes that lack of interest derives from the fact that only the grantee faculty members teach a particular course. One pair mentioned that they experience much more interest in their SoTL work on learner autonomy at national conferences than in their own department. They see colleagues at distant conferences “writing down things they say” about their learner autonomy projects and “people ask questions” of them afterward.

Going public was a requirement of accepting these grants, throughout the three years. Presentation at the annual Illinois State Teaching-Learning Symposium was mandatory, as was

submission of an article to a print or online outlet. The 2007-2008 call for proposals included a requirement for uploading a “web snapshot” of the project onto the Illinois State SoTL website. We wondered how the teams’ faculty members were dealing with these mandated outcomes of their grant. All grantee faculty members with whom we spoke seemed energized by going public. Faculty members, often with students as co-presenters or co-authors, are taking multiple opportunities to spread the word orally and in writing. Some of the earliest recipients have published grant-related papers, and numerous articles are under review or in revision or preparation. One National Science Foundation grant application is a direct outgrowth of a learner-autonomy project from the 2007-2008 round of Illinois State’s SoTL grants.

Student voices clearly contributed to the quality of these projects. In addition, students and their faculty teammates expressed gratitude for the chance to push the instructional envelope a little farther in search of ways to get students to want to learn on their own, either as part of a class or entirely separate from the classroom. As one professor put it, these projects are a great way to mentor students as researchers and can truly be “career changing” for both faculty members and students.

Conclusion

These SoTL small grants had two major purposes. First, the funds were to help research teams learn about promoting learner autonomy and self-directed learning in a particular discipline or class or set of students. Second, the grants were one way to obtain student voices in SoTL by involving students—as research participants and as research partners or collaborators—in SoTL projects.

We learned several things about promoting learner autonomy through these projects (links to additional information on these learner autonomy projects via brief reports and web

snapshots can be found at <http://www.sotl.ilstu.edu/castlAahe/autoWeb.shtml>). For example, more than one of the projects found some support for the role of hands-on application, connections between theory and practice, and active learning in promoting aspects of learner autonomy. Involvement in original research and/or inquiry-based or discovery-based learning was also beneficial. There was limited evidence that providing some structure and support or scaffolding for students engaged in these types of assignments was an important characteristic of the tasks. Finally, instructor behaviors (teacher immediacy) can impact students' feelings of connectedness and reduced anxiety and, then, relate to greater autonomy in terms of confidence, sense of control, and self-regulation.

We close by offering some tips or best practices for involving students in formal SoTL research (see also McKinney, 2007b and advice in some other chapters in this volume). In our experience, it is best to require (by making funding contingent on doing so) student members on the research teams and a description of the student roles as part of the grant proposal. In this way, teams guarantee at least one student collaborator and invite them into what will more likely be meaningful roles if considered beforehand. In addition, faculty and staff researchers should identify student collaborators early on, and involve them from the start of the project, even in terms of helping write the grant proposal. Faculty can find students in a variety of ways but approaching students who seem interested and qualified, and have already taken the class on which the project focuses or in which the data collection will take place, seems to work well. It is best to involve students who will be at the university for more than another semester or two; in this way, they can see the project through and share their voices in the interpretation and making public phases of the work.

Student voices, of course, will not emerge sufficiently if we only assign the students trivial and/or clerical tasks; rather, these partners must have the opportunity to engage in meaningful and challenging aspects of the project. Students will often need training and guidance for their roles in the project but we should also treat them as collaborators and as individuals with useful insights to offer. We must create a climate that allows and encourages the students to offer their valuable voices and to raise questions or express concerns about the project or their roles. Students should attend any research meetings or research/writing circles. Faculty and staff researchers should compensate their student partners with funding, travel, academic credit, co-authorship, letters of reference, and future opportunities. Certainly, the chance to co-present and co-author outcomes of the project is important for student learning and provides yet another opportunity for student voices to resonate in SoTL work.

We believe this grant program of SoTL research studies involving students as members of the research teams is one way to hear and respond to the voices of students in SoTL. In addition, the grant program is a way to encourage greater learner autonomy in student SoTL researchers as well as in the future students in the classes studied and beyond.

References

Illinois State University. (2009a). Quote retrieved July 20, 2008, from the Illinois State

University Web

Site:http://www.educatingillinois.ilstu.edu/plan_sections/core_values.shtml.

Illinois State University. (2009b). Quote retrieved July 15, 2008, from the Scholarship of

Teaching and Learning Web Site: <http://www.sotl.ilstu.edu>.

Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistics*, 20(1), 71-94.

McKinney, K. (2007a). Broadening SoTL involvement and application via SoTL grants: Moving toward greater impact. *The International Commons*. May.

McKinney, K. (2007b). *Enhancing Learning through the Scholarship of Teaching and Learning: The Challenges and Joys of Juggling*. San Francisco: Jossey-Bass/Anker.

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