Two Birds, One Stone: Integrating Communication Proficiency Development Into Existing Academic Courses

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This article discusses the pedagogical knowledge required to develop students' communication proficiencies as part of their academic experience, proposes a method of doing so, and illustrates that method using a recent example. Using the case-study approach, first, the challenge is presented while its complexity in the context of academic studies is analyzed. Then, with implementation of the conceptual framework of "disciplinary literacy," an original solution is offered in the form of a rolling multistage task in a seminar course that was a part of the master's in teaching program. The rolling multistage task revolves around the development of the pedagogical content knowledge necessary to teach argumentation, and it includes building up useful practices and explicitly defined strategies for integrating writing education in a range of courses in a teacher education framework. Each instructional stage of the assignment and its rationale are presented in detail, aiming to enable the readers to implicate it to their settings. The rolling multistage task was developed specifically to the context of a seminar course for the graduate program in teacher education. Concluding remarks explain how the chosen writing skills match the course's aims and contents, as well as the students' background. Additionally, they deal with the importance of personal epistemology and of metacognitive knowledge in shaping meaningful and applicative experiences in schooling.

Keywords: communication proficiencies, metacognition, argumentation, disciplinary literacy, academic courses, teacher education

Introduction

Fostering adult students' written and oral communication proficiencies during their academic studies is a national and international priority (Berman & Ravid, 2009; McConachie & Petrosky, 2010; Moje, Overby, Tysvaer, & Morris, 2008; Pollack, 2012; Zygouris-Coe, 2012). However, while the desirability of teaching these proficiencies is widely agreed upon, experience has shown the difficulty of actually doing so (Weinberger, 2018a, 2018b). Dealing with this challenge requires direct and deliberate efforts—on the part of teachers and institutions—to develop these abilities among learners. But what form should these efforts take?

The question of how best to put the communication proficiency agenda into practice is a source of lively debate among lecturers in higher education (Shanahan & Shanahan, 2012; Moje, 2012). Most particularly, this debate revolves around two issues, namely, (a) in what framework the topic should be taught and (b) who should be assigned the job of teaching it. In other words, should it be taught in courses dedicated to fostering communication proficiencies by lecturers that specialize in teaching writing, or should each academic course combine this instruction with its disciplinary content, thereby placing the responsibility for instruction on lecturers that specialize in a variety of other disciplines? This debate leads to another key question: What kind of pedagogical knowledge is needed to teach proper communication proficiencies? The current article posits an answer to these

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questions and illustrates it using an example from my own teaching experience in a recently adapted teacher education course.

Relevant Distinctions

The answer proposed in this article is predicated upon the notion of "disciplinary literacy," according to which "each subject area or discipline has a discourse community with its own language, texts, and ways of knowing, doing, and communicating within a discipline" (Zygouris-Coe, 2012, p. 38). Proponents of the need to distinguish between different literacies for different disciplines have pointed out that different disciplines—such as science, history, and mathematics—can have very different rules and guidelines for constructing and conveying knowledge (Shanahan & Shanahan, 2008). Scientific claims, for example, must generally be supported by empirical evidence drawn from experiments. Historical claims, in contrast, rely on support of a different kind, like the corroboration of multiple textual references and a careful, critical attention to the context in which the claim was made. Mathematical argumentation, in turn, differs strongly from both of these, with the result that each discipline is marked by its own "radically different…practices and forms of representation" (Moje, 2008, p. 100). In other words, each disciplinary discourse includes an appropriate vocabulary with which to discuss its content, as well as specific types of arguments and rhetorical terms that are accepted and acknowledged as appropriate by that particular field (McConachie & Petrosky, 2010).

The notion of disciplinary literacy therefore implies that communication proficiencies must, to some extent, be tailored to the specific discipline in which they are to be used and, hence, must be taught in a setting, and by an instructor, specifically suited to that discipline. This idea is further supported by educational research indicating that a productive application of skills is closely related to the field in which those skills were learned and that their transferability from one field to another is very limited (Zohar, Weinberger, & Tamir, 1994; Weinberger & Zohar, 2000; McConachie & Petrosky, 2010). Therefore, mastering the unique characteristics of expressive competencies in each discipline requires separate practice and application for each field.

However, despite the apparent importance of a specific disciplinary context, helping students manage the challenges of acquiring literacy in any discipline does still require a particular type of professional pedagogical knowledge. There is, therefore, a need to provide educators with discipline-specific knowledge and tools for conveying the unique content of literacy, to help them promote this set of proficiencies among learners. This syntactic aspect of each discipline includes understanding how knowledge is created and shared in each discipline and a familiarity with its structure, goals, practices, and discourse.

In summary, because disciplinary literacy extends far beyond helping students with text comprehension and organization and focuses on learning how to think, inquire, and communicate in each discipline, it requires a shift from a generic to a discipline-specific way of teaching and learning. We, as instructors in higher education, must develop strategies and practices for fostering our students' discipline-specific knowledge and skills (Shanahan & Shanahan, 2012). Based on these assumptions, and in accordance with the approach of disciplinary literacy, this article proposes an approach that integrates the cultivation of communication proficiencies into disciplinary courses, demonstrating how this is done in practice in the context of a seminar course on the subject of developing higher order thinking. The principles of the suggested pedagogy are presented and discussed in the closing remarks.

The Context, the Defined Challenge, and the Proposed Solution

The example presented in this article follows the implementation of an extensive new agenda designed to foster the oral and written communication proficiencies of all the students in the faculty

of education at a large teacher training college in Israel (Weinberger, 2018a). The proficiencies in the faculty were developed through several channels, first and foremost within dedicated courses taught by instructors who are experts in this field. The scope of the implementation of writing skill promotion in these courses has grown each year since the agenda's inception. But though the contents of these courses constitute a crucial foundation of knowledge in the field of writing and expression, they are by no means sufficient on their own. Meaningful change in students' communication proficiencies can occur only after they have accumulated a certain critical mass of experience in writing, feedback, and revision (Weinberger, 2018a). Emphasis was therefore placed on integrating writing into other disciplinary courses taught by instructors who are experts in their own field rather than in writing.

A range of evidence regarding the agenda's implementation was collected and analyzed, revealing that, on the pedagogical level, this implementation posed challenges to both the faculty members and the students (Weinberger, 2018b). The instructors had difficulty integrating the instruction of communication proficiencies into their courses in a way that would not compete with the course's primary aims. Correspondingly, the students were unable to translate their writing experiences from courses that incorporated the instruction of communication proficiencies and usefully transfer them to tasks that were assigned in other contexts. Their acquired knowledge and skills remained largely "trapped" in the contexts of the courses in which they had been learned and they did not internalize these things to the extent that they could be used as tools in other academic contexts. This phenomenon may be because the teaching in those courses was not aimed at such a transfer (Zohar & Barzilai, 2015).

The primary argument of this article is that these deficiencies in the teaching and learning of writing are due to the fact that both instructors and students currently lack the necessary metacognitive knowledge in the field of communication proficiencies (Barzilai & Zohar 2016). From the teaching prospective, developing learning activities that integrate direct instruction of communication proficiencies with the topics of courses requires a particular pedagogical content knowledge. From the learning point of view, the awareness and strategic knowledge associated with writing proficiencies should serve as a tool that can be applied in many relevant contexts, instead of remaining only in the context in which it was learned. Accordingly, deep pedagogical changes are required in both instructors' teaching and students' learning experience, so as to find useful ways of intertwining disciplinary content knowledge with knowledge of communication proficiencies (Weinberger, 2018b).

The development of students' communication proficiencies, like the development of any type of skill within a learning framework, requires pedagogy that includes clear and explicit references to the relevant strategies and metacognitive knowledge (Weinberger & Zohar, 2000). As with any building of new knowledge, developing new communication tools and skills also requires teaching efforts that are direct and carefully planned (Zohar & David, 2008). Students' abilities to properly use strategies, particularly in the field of writing, are dependent upon their control of the relevant meta-strategic knowledge. As defined by Kuhn (2000), this means knowing when, why, and how to use these strategies (ranging from correct use of American Psychological Association style to the use of rich, correct, and precise language and rhetorical strategies for increasing clarity and coherence) in future relevant situations.

Full and meaningful implementation of writing skill development in academic courses requires the academic staff to have specific pedagogical content knowledge in the subject of disciplinary literacy in teacher education. This knowledge includes control of knowledge and strategies in the field of writing skill development that is specific to the context of teacher training, control of the relevant metacognitive aspects, and the creation of a professional discourse—a shared language and practice used by all those engaged in promoting this goal (Freeman, 1993). Gaining familiarity and

experience with these processes will help instructors coordinate the writing skills they wish to integrate into their course with that course's goals and teaching method. It will also help them to develop practices that provide their students with the best response to their specific needs—both now and as future teachers in their own right (Fullan, 2007).

One Example: A Rolling, Multistage Task

The Principles of the Assignment

In his book *Change Leader*, Michael Fullan (2011) claimed that effective leaders do not move immediately from theory to practice, but carefully test what actually works in their field, analyzing each example in depth to determine how theory and research can help them achieve their goals. He coined the term *deliberate practice* to describe this process of careful transition, of gradually developing insights that can improve practice and help others make the desired change (Fullan, 2011). In the case of our college, the faculty used this approach to search for a way to improve the pedagogical level of the new agenda project, working to drive the learning process by means of individual "islands" of successful practice accumulated by the faculty teaching staff. The example presented here represents one such island, a "rolling, multistage task" developed as part of the seminar, "Learning to Think: Fostering Thinking in Educational Discourse" (part of the Master of Teaching degree in education).

The assignment was designed based on the assumption that the successful implementation of communication proficiencies in instruction requires two key components. First, the skills must be taught directly and explicitly in the context of the course (Segev-Miller, 2007). Second, students must be provided with relevant metacognitive knowledge, such as formal academic vocabulary with which to name the skills they are being taught, awareness of the need to use these skills in certain circumstances, and the ability to apply them properly. Based on these ideas and the *technological pedagogical and content knowledge* model suggested by Thomas, Herring, Redmond, and Smaldino (2013), a rolling task was developed, designed to facilitate the in-depth implementation of pedagogical and content knowledge pertaining to written and oral communication.

The course in which the rolling task was applied was devoted to the integration of the development of higher order thinking skills into educational frameworks, focusing on the connection between this development and the promotion of meaningful learning of the given disciplinary content. As course instructor, I chose to integrate explicit instruction of the writing skill "argumentation" into the course, in a way that would support the course's original aims, namely, (a) understanding the importance and necessity of fostering thinking skills in educational frameworks, (b) improving students' higher order thinking skills, and (c) developing pedagogical knowledge in the field of thinking skill development. By using writing development tasks to promote the course's other aims and taking advantage of the students' "home time" between meetings, the instructor eliminated the competition over one of the course's central resources—time. The harmony between the course's original aims, such as developing higher thinking skills and writing a final seminar paper, and the additional aim of improving students' writing ultimately encouraged meaningful and effective learning and motivated the students to invest in the work.

The Steps of the Assignment

Step 1: Justification

The first step of the rolling, multistage task was introduced to the students at the end of course's second lesson. The students were asked to think about the justifications for integrating the development of thinking skills into educational processes and to write their ideas down. At the beginning of the third lesson, during a class discussion based on the ideas students had proposed in

their home assignment, the instructor helped them to gather, conceptualize, and broaden their ideas and then sort them into categories. Most of the students had prepared lists of separate notes that included various ideas addressing the potential benefits of developing thinking in educational settings. During the discussion in class, they were exposed to a much greater number and variety of ideas, which were developed during the discussion, theorized based on academic literature and associated with one of the following four themes: justifications rooted in notions of social justice, the need to prepare students for future academic study, the importance of fulfilling each individual student's potential, or the promotion of in-depth understanding and meaningful learning. At the end of the lesson, the students were asked to go home and rewrite their text, based on the ideas from the class discussion and additional literature from the course's optional reading list. Moreover, in performing this task, the instructor also required them to make use of at least two articles from the course's bibliography. They were asked to bring the revised text to the following lesson.

Step 2: Argumentation

The course's next (fourth) lesson focused on a central higher order thinking skill (according to the declared aims of the course)—argumentation. The activity in class included a discussion addressing the importance of argumentation proficiencies in critical thinking, on their role and importance in our ability to express and support an opinion, and in promoting good communication. A significant portion of the lesson was devoted to explicit and direct study of the structure of arguments, basic and complex, according to Toulmin's (2003) method, and to practicing the use of facts, conclusions, warrants, backing, and rebuttal (including visual representations) in designing valid arguments for claims in various settings. At the end of that lesson, the students were given another homework assignment: to rewrite their text as a paragraph that represents their opinion of the topic of integrating thinking skills into teaching, according to what they learned in the current lesson, using the argumentation tools. This was the second time the students were asked to rewrite their work, without having received any external feedback. Once again, they were asked to bring their restructured argument to the next lesson.

Step 3: Conceptualization

The fifth lesson addressed the didactic aspects of argumentative writing: conceptualization strategies for directly teaching the skill of argumentation, explaining the criteria that define a valid, well-supported argument and providing explicit tools for the assessment of arguments. In the last 20 min of this lesson, the students were asked to swap their rewritten argumentative paragraph with the person sitting next to them in class, to read it carefully and provide their peer with written evaluative feedback on both the content and the writing. Students were then asked to take their own paragraphs home and revise it again, based on their peer's comments and other ideas that were taught during the past three lessons, for final submission to the instructor in the next lesson. After receiving the instructor's feedback (written or oral) and amending the paragraph according to the comments, the students were asked to begin writing the theoretical background section of their final seminar paper, using their paragraph as a base and expanding it.

Step 4: Reflection

The final stage of the rolling task was a reflective analysis of the task instruction, which included examining the teaching practices and formally conceptualizing the pedagogical-didactic principles underlying the integration of writing skill development into the seminar course. The discussion in class referenced the following themes:

• Students' active involvement in all stages of the task, such as expressing (in writing and orally) their own opinion on the given subject (justifications for integrating the development of thinking skills into education), and applying and practicing Toulman's model and evaluation rubric during the lessons.

- Collaborative learning, which occurred during class discussions, in the students' peer evaluation of one another's writing and the instructor's contribution by giving detailed feedback on student work.
- Self-regulation components that were integrated during the learning process. These included multiple drafting and rewriting, expanding prior knowledge based on reading academic literature, and getting feedback from colleagues and the instructor only at advanced stages of the writing assignment.
- Metacognitive modeling using discussions to conceptualize the intellectual strategies that were developed throughout the rolling task and the pedagogical components of the instruction process, using the "language of thinking." The target intellectual strategies in this rolling task included argumentation, critical thinking, and categorization. The pedagogical knowledge included (a) understanding why the argumentative strategy was relevant and necessary in the current learning context and (b) understanding how it was implemented appropriately to the course objectives. The discussion also dealt with the relevant pedagogical–didactic principles of the task, such as construction of deep and meaningful knowledge about the rationale of incorporating higher thinking, integrating formative evaluation of experienced colleagues during the learning processes, and practicing procedural learning during the course.

Closing Remarks

One of the most critical points in this task was choosing a writing skill to focus on that matches the course's aims and contents, as well as the students' backgrounds. Focusing on argumentation in a seminar that deals with fostering higher order thinking skills in education, for example, is an appropriate choice because doing so addresses one of the central thinking skills that are taught in the course, namely argumentation. It also trains the student in the argumentative academic writing necessary to complete the final task (a seminar paper). Finally, it allows students to experience, as learners, the proper teaching methods for fostering these skills, namely teaching them gradually as a process and teaching them actively, through experience.

Matching the rolling task as closely as possible to the original aims of the course increases the chance that these goals will be synergistically achieved, along with the improvement of the students' writing skills, thus increasing instructors' motivation to integrate such instruction into their seminars. By asking the students to think about the rationale underlying the promotion of a particular educational approach at the beginning of the course, the task encouraged the students to think deeply about the relevance of the topic they were studying and to employ thinking that was systematic, coherent, and evidence-based. Moreover, such a task encourages students to express themselves and to gradually formulate their own educational value system and worldview. The task was structured as a process, in which students work in stages both in and between lessons, writing drafts, getting feedback, and rewriting with the aid of professional literature, their peers, and instructor. Altogether, this progression generated a critical mass of cumulative experiences, which were measured out in manageable pieces over time. Because the students in this seminar are student teachers, the entire experience could serve them as a model for the pedagogical aspects of integrating writing skill development into the teaching of different contents.

Finally, this example stresses the importance of personal epistemology, namely people's thinking about their own knowledge (Hofer & Benedixen, 2012) and of metacognition, namely, knowledge about cognitive activities and strategies (Flavell, 1987), which is shaped by their own schooling. There is strong evidence that teachers' epistemological beliefs have an impact on their instructional decisions and classroom interactions (Richardson, 1996) and that self-regulation activities play an

important role in enhancing individual meaningful learning (Zimmerman, 2008). Furthermore, an ongoing awareness of one's own learning behaviors increases instruction's effectiveness and creates more valuable learning experiences (Bennett, 2011).

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