Navigating the Ever-Changing Educational System

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The direction in which we set our compass, toward autonomy versus uniformity, creativity versus standardization, shapes both curriculum and instruction. The presence of contradictory opinions about these issues creates seemingly unending conflict in the educational community. We see evidence of these struggles in this issue of the *Journal of Curriculum and Instruction (JoCI)*, where all five articles demonstrate the need for teachers to be critical thinkers regarding their curricula, materials, and instruction, as well as the profession at large and their place in it. Specifically, this issue of *JoCI* contains two articles that focus on curricular content and pedagogy, two articles about teacher development, and one article discussing the challenges associated with standardization of curriculum and assessment. We hope these articles will serve our readers well as they navigate their journey toward the worthy pursuit of formulating and re-formulating their own answers to questions about knowledge, learning, and teaching.

Content and Pedagogy

The selection and use of curricular materials is inextricably linked to the way that instruction plays out in classrooms. Finding the "right" program or textbook continues to be a dominant focus of many policy makers, administrators, and teachers. Textbooks contribute to both content knowledge and pedagogical outcomes and have the potential to positively impact teaching and learning of all subjects at all grade levels. Vitale and Romance (2011) present an intriguing "proof of concept" study in their article, which reveals that using rich science content as a means to simultaneously improve both reading and science achievement can have positive results. They argue that their findings dispel a commonly accepted notion that young students need to be proficient at decoding in reading prior to engaging in reading informational text. While longitudinal studies with more sensitive assessment tools would provide additional insight into the specific program being studied, their research suggests that at least in Grade 2, the use of rich contextual material can be used to improve reading comprehension skills. At a time when science instruction in elementary classrooms is being neglected in favor of intense reading and math instruction, this research offers hope that schools do not have to approach these areas in an "either or" fashion.

Pinto, McDonough, and Boyd (2011), also published in this issue of *JoCI*, focus on the use of textbooks in high school philosophy courses in Ontario, Canada. These authors examine the instructional practices used by teachers specifically in regard to the

manner in which they foster students' interactions with philosophy textbooks. They situate their study by noting that the majority of classroom instruction is textbook driven, but agree with the Canadian Ministry of Education, who in their rationale for including philosophy courses in the secondary curriculum, articulate that the very nature and purpose of philosophy is to teach students to become critical thinkers. Thus, these authors understandably enter the research expecting to see students engaged in some level of critical inquiry when interacting with textbooks. However, they found that this type of interaction was rare, suggesting that many teachers missed opportunities to develop students' critical thinking skills in the manner expected. The authors' discussion of teachers' comments regarding barriers to taking such an instructional approach is fascinating. These barriers touch on teachers' lack of content knowledge in philosophy, lack of pedagogical knowledge for facilitating critical inquiry, beliefs that students are not capable of critical thinking, and interpretations of policy-enforced accountability expectations, all of which have broad implications for teacher education and professional development.

Teacher Development

The focus on teacher development continues in the article by Hadley and Dorward (2011), which focuses on the relationship between teachers' anxiety toward math, anxiety about teaching math, and the resulting impact on student achievement. Elementary teachers' fear of math is well-documented in the literature, but the way in which this translates to student learning is less clear. In fact, according to their results, the relationship is more complex than anticipated. Based on responses from almost 700 elementary teachers, these researchers found that anxiety about math in general does not have a significant impact on student achievement, but anxiety about teaching math has a significant negative correlation with student success. The authors appropriately avoid offering explanations of their findings, but do point out that efforts to help elementary teachers overcome general math anxiety may be misplaced, or at least unproductive, providing a strong rationale for focusing elementary level math methods courses on effective pedagogy in math. Experience, too, seems to contribute to lower levels of anxiety about teaching math; as such anxiety peaked among first year teachers and decreased steadily as teachers gained experience across their careers.

Mid-career teachers are the focus of the piece by Coulter and Lester (2011), who take the stance that at a time when large numbers of teachers leave the profession within the first five years, it is important to understand how those who choose to stay view their professional experiences. The researchers used grounded theory approach as they interviewed eight high school English teachers who had been teaching 10-17 years. Their analysis resulted in four separate but related themes, which they organized into a model that suggests interesting interplay between the teachers' personal and professional identities and the evolution of each over time. They suggest that an awareness of how teachers themselves describe the process of persisting in teaching,

despite the challenging complexities of the profession, could lead to more appropriate forms of guidance and support, ultimately helping reduce teacher attrition.

Standardization

Finally, Rubin and Kazanjian (2011) take on what they characterize as the capitalist agenda for education, and they make a case articulating the negative impact of standardization on teachers, students, and the purposes of education. The authors provide a historical perspective highlighting the development and gradual implementation of the social efficiency model of learning which has culminated in recent years in federal policies like No Child Left Behind (2001) and Race to the Top (American Recovery and Reinvestment Act, 2009). They argue that such reforms push standardization and accountability that— intentionally or not— result in students who can take tests, but struggle to think critically. Rubin and Kazanjian question the direction in which we are moving: away from developing educated citizens ready to take an active role in our democratic society and toward creation of an unquestioning workforce incapable of independent thought. They conclude by calling for a revolution of sorts, issuing a challenge to all educators to become active participants in the politics of education.

Conclusion

We anticipate that this issue of *JoCI* will contribute ideas that can help teachers and those who support them effectively chart their course through the rough waters of the seemingly ever-changing educational policy and its associated reforms. The complexity of the current educational landscape requires informed participants; it seems clear that critically thinking teaching professionals are necessary in order to prepare critically thinking students. While these articles may raise more questions than they answer, they undoubtedly offer insights for, or identify the challenges of, supporting teachers as they face complex situations that require judicious, and usually quick, decisions in order to carry out the kinds of thoughtful teaching that, despite restrictive policies at all levels of education, we have come to expect in the 21st Century.

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