Giving Teachers Back to Education: Virtuoso Teacher

Emrah ÖZYÜREK

School of Education, Durham University, Durham, United Kingdom

emrah.ozyurek@durham.ac.uk

Emrah Özyürek is a Ph.D. student at Durham University with a research interest in science education, philosophy of science, science teacher education and chemistry education.

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The imperative role teachers play in providing quality education that enables individuals to function effectively cannot be stressed enough. In this regard, the teacher's individual characteristics—his personal philosophies, subject matter knowledge (SMK), educationally appropriate judgement, practical wisdom, notions of pedagogical performance, ethics, morals and aesthetics—inexorably come into play in the transmitting of knowledge, as well as in the teacher's acting as a virtuoso. This study, therefore, seeks to articulate the concept of "virtuosity" in teaching, examining in particular the ways in which a virtuosic teacher comes into being. The most qualified teachers are those capable of amalgamating knowledge and expertise with practical wisdom, educationally appropriate judgement, performance, ethics, morals and dialogue, all of which, I argue, contribute to the making of virtuoso teachers.

Keywords: Virtuosity, Virtuoso teacher, Beliefs, Dialogue

Introduction

The notion of *virtuosity* can be traced back to ancient China and Greece where it was conceived and primarily practiced in educational contexts. Rooted in a variety of philosophical discourses, most notably by Aristotle and Confucius, the idea of *virtuosity* is crucial in offering a new conceptual framework for researchers preoccupied with the question of virtuoso teaching and its practicalities in an attempt to go beyond the implementation of systemic interventions that effect change at school level (Barber & Mourshed, 2007; Mourshed, Chijioke & Barber 2010).

The Severe Shortage of Qualified Teachers

A plethora of studies have been undertaken to identify the components of great teaching (Coe et al., 2014) and the criteria—skills, abilities or knowledge, to name a few—perceived as constitutive of a good teacher (Wilson, Shulman & Richert, 1987).

Noteworthy, however, is the fact that little attempt has been made to examine systematically what lies at the heart of a virtuoso teacher who combines personal

elements with action elements in order to provide students with the most beneficial, desirable and effective teaching. Despite that, the profound significance of education in general, and science teaching in particular, have been increasingly foregrounded by governments and policy makers in recent years (Biesta, 2013). There exists a stark shortage of specialist teachers, (Weale, 2015; Morse, 2016) especially those highly qualified for science subjects, (Stets *et al*, 2016) which is a serious issue that needs to be confronted and addressed.

The Meaning of "Virtuosity" in Educational Contexts

Originated from the Greek word "arête", the word virtuosity means "virtue" when translated into English, generally referring to the moral or character excellence of an individual (Jorgensen & Nafstad, 2005). Remarkably, according to Aristotle, the ultimate goal of human being is to attain "human excellence" or "an excellence of soul", denoting the technical expertise and practical wisdom related to the excellence of character (Aristotle, 1999, p.26). The Greek moralists come to the conclusion that an individual's virtuous traits are twofold: on the one hand, a behavioural aspect in terms of his action; on the other hand, a psychological aspect which involves his motives, aims, concerns and perspective (Homiak, 2003).

In Book I of the Nicomachean Ethics, Aristotle calls into sharp focus the notion of human action (ibid., p.1). According to him, individual pursuit is, in essence, the pursuit of certain ends or goals (action), or "Telos." in Greek. Importantly, wisdom, judgement and knowledge, along with practices, play key roles in reaching excellence. In this regard, virtuosity not only refers to artistic performance carried out by actors, dancers, pianists, football players and so forth, but also, specifically in educational contexts, indicates practical wisdom, moral and ethical values, dialogue and aesthetics combined with educationally appropriate judgement (Biesta, 2015).

A Good Teacher Makes Real Difference

"...teachers are engineers of the human soul, gardeners of young minds and the developer of intellectual resources" (Paine, 1990, p.50).

An exceptionally gifted and capable teacher, that is, a *virtuoso*, is able to make an enormous difference to students' learning outcomes. According to Haycock's statistics (1998), such teachers enhanced low achieving students' learning gains by 53%, compared to 14% for the less effective teachers. In the similar vein, UK's Royal Society of Chemistry, known as RSC, urged that every subject should be taught by a teacher who is not only exceedingly enthusiastic about teaching and goes the extra mile but also in possession of good subject knowledge (Kind, 2009). The cultivation of a virtuoso teacher, therefore, should be placed at the heart of teacher education in order to effectively equalize the achievement outcomes of pupils (Kang & Hong, 2008).

The Philosophical Perspectives of Teaching and Learning

It is worth pointing out that *Eudaimonia*, or "human flourishing", embodies two intimately interlaced concepts known as *praxis* and *poiesis*. *Poiesis* refers to the act of making and *praxis* refers to the act of doing, both of which call for judgement (Wall,2003). The process of making *something* involves certain technical skills known as *techne*, whereas in the case of doing *something*, what matters the most practical wisdom (Markus, 1986; Biesta, 2013,). Remarkably, the notions of *praxis* and *poiesis* are particularly pertinent in the field of education, shedding new light on the means by which one can obtain a desirable education in order to be an individual marked by excellence.

Generally known as Master Kong, Confucius, almost a century ahead of Aristotle, called attention to the way in which the virtue of doing good through self-learning and self-cultivation serves as the main purpose of human being. His teaching,

more importantly, placed special emphasis on how to become a good person with good characteristics rather than on simply and singly acquiring knowledge (Shim, 2008).

In line with Aristotle and Confucius, a great number of contemporary educational philosophers—Paulo Freire, for instance—have made noteworthy contributions to the study of critical pedagogy (Zhao, 2013). Teacher-student interactions, consisting of a democratic approach to attain a democratic society, play a particularly important role in this regard (Díaz, 2018). Freire (2000) suggests that critical thinking is essential to acquire wisdom and virtues for learners. According to him, it is through analysing the materials critically that learners are enabled to attain knowledge.

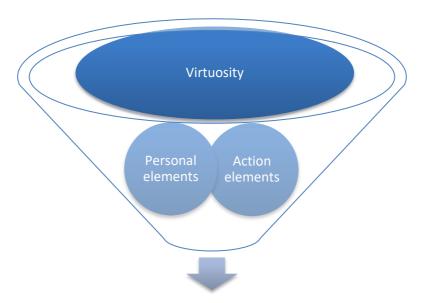
In order for the educational system to play a truly transforming role in students' lives, teachers are not only expected to make use of a wide range of pedagogy, curriculum, assessment, strategies in transmitting knowledge and skills, but also be responsible for the future of the society (Apple, 2012).

Different Dimensions of Virtuosity

Highly effective teaching involves the knowledge of subject matter, pedagogy and virtuosity, the amalgam of aesthetics, dialogue, practical wisdom, educationally appropriate judgement, performance, classroom crafts, personal beliefs, ethical issues and moral instructions, as well as cultural understanding (Paine, 1990; Pratt, Kelly & Wong, 1999; Shulman & Wilson, 2004; Carr 2010). In order to be considered as a virtuoso, the teacher needs to incorporate action elements into personal elements, that is to say, he not only possesses a wide range of pedagogical knowledge and strategies which he applies in delivering active learning, but also exhibits additional performance-related qualities. Notably, the action elements centre on dialogue, aesthetics, classroom talk, craft knowledge, whereas the personal elements revolve around the notion of

personal beliefs, ethics and moral values, judgement, practical wisdom and culture which work together in the portrayal of the teacher as an artist (Figure 1).

Figure 1: Elements of virtuosity



The teacher as an artist

Personal Beliefs

An increasing number of researchers have investigated the impact of teachers' beliefs on students' learning outcomes (Pajares, 1992). This is particularly due to the existent mis-conceptualisations and misunderstandings of teachers' beliefs in relation to students, specific subjects and curriculums, which differentiate one teacher from the other, positively or negatively (Nespor, 1987).

Regardless of whether the teaching materials lie within or outside one's specialism, self-confidence and anxiety, for instance, are two of the most prominent feelings that have a lasting impact on trainee teachers' performance. Kind (2009) looked into the extent to which 'Subject Matter Knowledge' (SMK) exerts influence on the self-confidence of science trainee teachers. According to seventy-one questionnaires and twelve interviews targeting science trainee teachers in England who have

specialised in chemistry, physics or biology in pursuing their degrees, good teaching is closely linked to the teacher's self-confidence rather than his SMK.

Furthermore, Kind (2015) associated teachers' beliefs in science with science-teaching orientations (STOs), which refer to a teacher's *general way of viewing or conceptualising science teaching* (Magnusson *et al.*, 1999, p.97) and *general patterns of thought and behaviour* respectively (Anderson & Smith, 1987, p.99) in PCK. Based on statistics involving 237 preservice science teachers (PSTs) who took an initial teacher training course at a university in Northern England, Kind arrived at the conclusion that *PSTs' STOs more strongly emphasize notions about teaching and learning than their beliefs about science* (Kind, 2015, p.147).

A teacher's erroneous beliefs, thoughts and presumptions in classroom contexts inevitably lead to incorrect judgements of his students. Hence, an appropriate judgement as one of the most important dimensions of virtuosity is imperative for teachers to teach effectively.

Ethical Issues and Moral Instructions

Lumpkin (2008) called attention to the idea of teachers being 'models' by asking "What are they modelling?" In response to the question, Lickona (1991) may provide an answer by claiming that schools and teachers should be responsible for character education.

Rather than identifying an ultimate end or supreme principle that serve as a criterion for ethical evaluation, the goal of Dewey's ethics lies in identifying a method for improving our value judgements (Anderson, 2005). Noticeably, this resonates with one of the most distinctive features of Chinese ethics, namely, the respect for practical problems that require a practical and moral response along with an ethical consideration. Confucius, for instance, argued that character should be cultivated through virtue ethics (Rothstein, 1966; Radcliffe, 1989).

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In this light, virtuoso teachers might get students to think about what happens to any heavy metal ions, such as those of lead, that are poured down school laboratory sinks (Reiss, 1999, p.123). Therefore, the primary aims of teaching ethics in science include cultivating students' ethical sensitivity, increasing their ethical knowledge, as well as improving their ethical judgement, and producing well-rounded students for a democratic society.

Dialogue

To a certain extent, dialogue lies at the heart of being human as it provides an essential way of communication. Or to put it another way, dialogue enables us to transform reality, and in doing so, creates a better, more virtuous society. It is unquestionable that dialogue plays a key role in both the teaching and the learning process. The dialogical classroom in which dialogical pedagogy is applied is important for improving interaction between teachers and students. (Shor & Freire, 1987).

Mercer (2008) stressed the significance of classroom talk in the fostering of teacher-student relationships. Based on interventional research in British primary schools, Mercer's analysis shows that dialogue contributes substantially to improving understanding of science and mathematics. Moreover, according to a study carried out on sixty 9-10 years old children in three state middle schools in London, the "exploratory talk" is particularly beneficial to students in terms of constructing better reasoning through peer interaction in the presence of teachers as facilitators. In addition, children who have been encouraged by teachers to perform "exploratory talk" arguably tend to gain better results on tests.

Gracious virtuoso teachers who are able to apply the dialogical way of teaching that requires aesthetic action can scaffold students' learning outcomes. Paulo Freire (2000), claimed that dialogue-based education offers teachers a means by which to create an effective environment or atmosphere. Therefore, his approach foregrounds the Imagining Better Education: Conference Proceedings 2018

ways in which teachers, in transferring what they know, reshape their existing knowledge with the help of students. Revolving around collaboration and communication, this approach is crucial in enabling teachers to gain practical judgement ability and cultivate a better relationship with the students.

Conclusion

Based on the literature review, the notion of virtuosity embodies two distinctive elements: personal elements such as personal beliefs, morals, practical wisdom, judgement and ethics, and action elements such as dialogue, aesthetics and craft knowledge. A virtuoso teacher is undeniably a role model for students, for he not only demonstrates remarkable enthusiasm about teaching, but also treats the act of teaching as an occupational commitment instead of simply a display of competencies.

Education is essentially a process of formation between teachers and students, parents and children, and human beings in society. The virtuoso teacher is an educational "artist" exerting a shaping force on society as a whole. It is crucial for students to be taught by *virtuoso* teachers who serve as role models for them and inspire them to become a knowledgeable person with respectable and admirable characteristics.

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