EDF4121:

Teaching: The Power to Change

Assignment Task 2

Namrata Adsul 28201620

Tutor's Name : Hilary Monk

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"Education is the most powerful weapon which you can use to change the world."

-Nelson Mandela

This quote was once said by a respectable figure - Nelson Mandela, known for his selfless actions towards changing lives of millions of oppressed. He was capable of bringing about that change because he of his belief in the power of education. Charged with knowledge, in my understanding, his actions positively impacted the world by instilling an understanding that motivated everyone to become responsible citizens of an egalitarian society. Thus, his statement gave a new meaning to education and reformed educational practices.

However, without the ownership of teachers, the most compelling policies cannot be effectively implemented because the possibility and pace of any change rests on teachers' wills and ideological dispositions (Mazurek & Winzer, 2015, p.649). Individual perspectives of teachers play a critical role in implementing transformative teaching practices (Mazurek & Winzer, 2015).

Hence, in order to ensure that teachers are capable of positively impacting lives of their students by teaching effectively, the Australian Professional Standards for Graduate Teachers (APST) describe the work expected of a graduate teacher. They are divided into three main educational domains — Professional Knowledge, Professional Practice and Professional Engagement. This essay briefly explains the content and intention of the seven standards in the first part, followed by further investigating two of them in detail in the next section. Demonstrations in practice of these two standards are discussed later. Lastly, the essay explains the primary reason of their importance over others to educate children to be change-makers.

The first category mainly comprises of knowing students and their learning styles as well as knowing the content and how to teach it (AITSL, 2011). Awareness of factors affecting child's development is critical in supporting their educational needs. The APST suggest that it is imperative to consider these external variables while teaching students as they learn in different ways. Strengths and needs of their individual linguistic, cultural, religious and socioeconomic backgrounds should be used to make

learning more effective (AITSL, 2011). This also includes understanding the cultural as well as historical circumstances of Aboriginal and Torres Strait Islander students.

While students with differing personalities learn differently, there is need for personalized teaching technique/practice with specific relevance to the way they learn best. As a result, alteration or enhancement of teaching programs using theoretical research to promote student learning will help. Hence, there is a requirement of implementing differentiated teaching practices to accommodate diverse learning abilities (AITSL, 2011). The next standard is related to curriculum knowledge and effective means of teaching it.

Importance of teachers' proficiency at the subject matter they teach in order to design and implement effective teaching strategies is stressed (AITSL, 2011). Their knowledge aids the planning process of structuring the content best suited for comprehension. Thus, logical sequencing helps students learn new concepts in an organized manner, building and relating new information to previously learnt ideas. In conjunction with the aforementioned focus area, state or national curriculum, assessment and reporting requirements should also be evidently reflected in teaching practice (AITSL, 2011). Working towards set standards ensures conformity. Specifically, effective planning of literacy and numeracy mainly in the early years create a strong base for students' learning. Furthermore, with a firm belief of students of the 21st century being digital natives, ICT should be used to expand learning as well as make content meaningfully relevant to the topic (AITSL, 2011).

The second division of the APST includes planning for and implementing effective teaching and learning strategies. Presence of a clear challenging goal before students begin their tasks helps them personally engage with the content of the activities and then plan and organize themselves accordingly. This sense of ownership towards their goal has cognitive, emotional and motivating elements. At the same time, without challenge, learners would be unable to achieve the best of their abilities. Therefore, the learning objectives need to be explicit, challenging and achievable for students of varying personalities (AITSL, 2011).

In order to ensure effective achievement of learning objectives and students reach an ability standard to work independently on their tasks, they need to be actively engaged in classroom lessons. As a result, lesson sequences need to be designed in a way that gets students engrossed in the subject matter (AITSL, 2011). Therefore, essentially, implementation of a wide range of teaching strategies in class activities to teach a variety of skills demands teachers to use a range of resources to make student learning impactful.

Under professional practice, teachers are required to create and maintain supportive and safe learning environments. This is created by establishing systems and processes where students' valued efforts result in effective learning. Such supportive environments also need to be places where students are enabled to interact and share personal ideas in a positive learning space. Additionally, their physical safety from external as well as internal threats from fellow students needs to be maintained. Hence, the teacher needs to use disciplining strategies to prevent and address issues.

Assessing student learning through formal and informal means is a significant aspect of a teacher's professional practice (AITSL, 2011). Data produced enables them to make adjustments to their own practice, help students grow through identification of gaps and analysis of overall progress over a period of time. Also, as students' parents affect their overall learning and development in indefinite ways, feedback and assessment reports provided to them ensure collaboration towards their child's advancement. This can only be possible due to maintenance of strong relationships from the beginning. The next section under the last category of the APSTs – Professional Engagement involves professional learning and engaging professionally with colleagues, parents / carers and the community.

Teachers' professional learning is believed to be an ongoing process. Hence, participation in professional and community forums to improve practice is suggested by AITSL (2015). Attendance at these events can broaden their knowledge due to the exposure to varied perspectives stemming from experiences from diverse communities. In addition, it is a requirement for adherence to the professional requirements such as code of ethics and conduct established by schools, government authorities and systems to ensure professionalism at the workplace AITSL (2015).

The standards mentioned above are required to be fulfilled by teachers to create a learning experience for students that ensures advancement. Among them, particularly, professional knowledge is considered to be the most common influence factor on instructional quality, and consequently on students' achievement because a sound awareness of students' backgrounds and personalities combined with good content knowledge (CK) and content pedagogy knowledge (CPK), enables the teacher to plan and implement effective strategies (Fortsch, Werner, Kotzebue & Neuhaus, 2016).

Hawkins (2005) suggests that classrooms are comprised of students with multiple identities created throughout their development as a child such as their experiences before starting school, at home and outside classrooms, which are mainly responsible for their cognitive as well as physical development. However, teaching styles are not well matched with these differences. This results in program designing for only a certain set of students and their success according to Richardson and Arker (2010), who argue that the connection between their personality and teaching style needs to be made by teachers in their pedagogical practice through brain-based education as it supports the need to differentiate instruction. If a student has a linguistic disability, knowledge acquisition compared to his classmates would be nil for him if the same teaching tools are used for his learning. Hence, a different teaching strategy needs to be implemented for him.

The more teachers understand the 'how' of students learning, the pedagogical significance of diversity in classrooms makes them better equipped to provide instruction that maximizes learning outcomes as students from different cultural, linguistic, religious and socioeconomic backgrounds have diverse learning needs (Wolfe, 2001, cited in Richardson & Arker, 2010). Studies conducted in American classrooms showed that students from a certain group of nationalities preferred a learning style that was relational to the field in which learning took place, whereas, another group of nationalities preferred a more analytical style that is independent of the immediate area of learning (Ramsay, 2005). This is just one example but it manages to prove the need for differentiated learning according to student needs. In relation to pedagogical knowledge (PK), CK and CPK are also included in a teacher's Professional Knowledge.

While CK deals with knowing the curriculum content and possession of conceptual understanding of it, CPK is described by Shulman (1987, cited in Fortsch et al., 2016) as the melding of CK and PK. Every subject has a different way of teaching that is more effective. Biology cannot be taught the same way Mathematics is as with dissimilar contexts, they also have different approaches to teaching and learning. Therefore, only after knowing the content can one select concepts and combine them with a logically functioning pedagogical practice, suitable for the needs of students' learning styles and abilities.

Teaching or pedagogy is followed by assessment to ensure its effectiveness. Churchill suggests that opportunities should be planned for assessment of learning to investigate if goals are met in the form of summative assessments at the end of a term to get an overview of students' learning progress, assessment for learning to identify areas of improvement on a regular basis after a lesson through worksheets and assessment as learning for children to reflect on their progress as well as develop personal development strategies to inform future learning (2015, chap. 12). It also provides teachers with data to plan actions for enhancement of learning. The next section provides illustrations of the two standards in practice.

An exemplification of knowing students to plan effective strategies was observed at the school I was placed at for my professional experience unit. It had students from more than fifty different nationalities. As a result, the class I was in comprised of students with varied cultural and linguistic backgrounds. My mentor teacher ensured her teaching strategies were well-suited for their learning abilities. She confirmed this by firstly acknowledging and relating to their diverse personalities through personal conversations. These led to discovery of their individual lives outside the classroom, which could be used to explore their interests and plan lessons based on them. Secondly, English being their second language, all her lesson plans included separate worksheets with meanings of words they might not have come across before. In addition, social experiences native English speakers experience were created to learn the language contextually. This helped them build their oral language skills. Next illustration is about the significance of knowing the content and how to teach it efficiently.

Here is a video of a Year 7 science teacher, Mandy, who has taken her students from varied linguistic background for an excursion to Alice Springs Reptile Centre (AITSL, 2012). They have been studying classification of living organisms and identifying them from different categories. This excursion was a way to reinforce concepts students have learned in class with the help of live demonstrations and real life experiences to get a practical understanding of these ideas. Thus, Mandy sought assistance of the keeper to show them different species of lizards. As coupled with science activities, intentional and explicit vocabulary instruction can benefit both English proficient and ESL children's vocabulary and literacy development of science content (Beck & McKewon, 2007), scientific names or the technical language of the discipline such as genus and specie was logically explained based on their positioning at 00:57 seconds in the video. In relation, one factor emerging as key to the learning and understanding of science is that there is coherence to the ideas of science (Eberele, 2008) and teachers are responsible to help students make sense of the science they are teaching such as how their names come into being. The science teacher attempted to accomplish just that. The overall lesson was sequenced to end with an after-excursion session discussing personal observations, findings and connecting them to new or already known facts about reptiles.

The standards mentioned above are required to be fulfilled by teachers to create a learning experience for students grounded with high quality teaching that enlightens their understanding of the world. Knowing Mandela's personal values and beliefs will help us understand his quote mentioned in the beginning of this essay. According to one of his followers, he believed that Education needs to be socially relevant. Therefore, during his presidency one of his cabinet ministers mandated educational institutions to cultivate education for democratic citizenship (Waghid, 2014). His manifesto also regulated a democratic citizenship education agenda based on ideals of democracy, social justice, equality, non-racism, non-sexism, humaneness, an open society, accountability, rule of law, respect and reconciliation (Waghid, 2014). In relation, the United Nations Convention on the Rights of the Child (UNCRC) aims to move education away from traditional notions of basic access to formal education to

"embracing a broad range of life experiences and learning processes that enable children, individually and collectively, to develop their personalities, talents, and

abilities and live a full and satisfying life within society"

(Munoz 2010, p. 14, cited in Allaf, 2015).

As a result, not only did Nelson Mandela stress the importance of education but he also showed us the value in change brought about by such transformations in attitudes towards education, which paves way to a reality where a more inclusive world can be imagined. The Organisation for Economic Co-operation and Development's (OECD) Secretary-General described some of the changes and priorities in education for tomorrow are to build people having capabilities to appreciatively accommodate, constructively engage and peacefully co-habituate with people having different values, beliefs and cultures (2009). If a teacher can accept this actuality, students will be given a socially relevant education. Subsequently, awareness of students' backgrounds and personalities will enable them to plan individual learning strategies for their effective educational development, ensuring learning as well as contextual understanding of the environment they grow up in.

This is where standard one – Knowing students and how they learn aims to shift from a single-centred approach to pedagogy to a multi-centred approach. According to Turner (2015, p.128), in educational situations, if two groups perform differently, it is assumed that homogeneous agents respond to similar circumstances in similar ways, also known as single - centeredness. It is blindly taken for granted that each group has a common motivation factor. Hence, failure to notice the complexity of individual characteristics among group members belonging to the same socioeconomic or cultural backgrounds leads to implementation of ineffective strategies. Even today, when the bulk of theories being used are single-centred, policymakers are looking for solutions which are multi-centred (Turner, 2015, p. 130). Here, multi-centeredness promotes differentiation to meet the specific learning needs of students across a wide range of abilities.

Along with a different approach to viewing pedagogy, another standard that fosters change is knowing the content and how to teach it. As discussed earlier, coherent science teaching practices are necessary, especially in today's 21st century knowledge age, wherein, logical comprehension is more important than the amount of information loaded into our brains. With increasing complexity of problems faced in society,

modification of existing knowledge to critically analyse a situation and then come up with innovative solutions through divergent thinking is required in an individual (Kivunja, 2014). If theoretical content is only stored as facts, or conceptual misunderstanding can lead to faults in its applicability. It is a professional as well as moral responsibility of a teacher to ensure this does not occur. Therefore, since teachers can have such a strong influence on children's educational and society's development, they can be considered to be torchbearers to bring about this transformation in educational practices. The power lies in their hands to ensure every student is part of this change.

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