Iraqi empirical models of teacher leadership propelling professional learning networks to optimise learning in a digitised age with languages of and for open access and modernisation

Altae, Mayamin ; Taysum, Alison

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Mayamin Altae
Alison Taysum

Abstract

The professional challenge this paper seeks to address is Iraqi teacher leaders do not have empirical role descriptions and are struggling to establish a professional autonomous identity. A socio-historiographical analysis of Iraq mapped to war is provided. Drawing on DeGruy's (2008) theorising of Post Traumatic Slavery Disorder, we are identifying Iraqis as experiencing Traumatic War, and therefore having Post Traumatic War Disorder. The Iraq Ministry of Planning's (2018) 'National Development Plan 2018-2022 identifies that nowadays there is a deficit in school buildings excluding those under construction of 8147 with overcrowding in classrooms. Most areas of Iraq continue to suffer from multi-dimensional poverty. Improving the effectiveness and efficiency of the education system to propel local entrepreneurial economies and mobilise economic growth through compulsory education, vocational education and life-long learning is very challenging. A lack of: modern curricula; competence based national assessment framework; empirical teacher leadership model/role descriptions prevent the development of skills sets of inclusionary labour markets that will deliver Iraq's ambitious development plan. Data collected from six educational professionals in the education system reveals participants are currently not implementing any aspect of 'An Empirical Model of Teacher Leadership' that emerged from a literature review. Further, they are not propelling Professional Learning Networks to optimise learning in a digitised age with languages of and for open access and modernisation. The evidence reveals they are ready to implement this model and have an appetite to do so. An Iraqi Empirical Model of Teacher Leaders is presented to emerge from the data that consolidates the modernisation of Iraq by applying A Blueprint of Character Development for Evolution (ABCDE) with a competence based Assessment for Personal and Social Learning. The model provides a pathway for citizens to develop thinking tools to i) recognise what counts as faculty of good judgement and ii) how to apply this to developing strategies to achieving the Sustainable Development Goals (United Nations, 2016) with sustainable business models.

Keywords

identity, voices, challenges, school leaders, Iraq, Mosul, empower

The Professional challenge, objectives and research questions

The professional challenge this paper seeks to address is Iraqi teacher leaders do not have empirical role descriptions and are struggling to establish a professional autonomous identity. Drawing on DeGruy's (2008) theorising of Post Traumatic

Slavery Disorder, we are identifying Iraqis as experiencing Traumatic War, and therefore having Post Traumatic War Disorder. Further, two comprehensive literature reviews conducted in 2004 and 2017 identify there is a lack of Empirical Models and Role Descriptions of Teacher Leadership Internationally and therefore in Iraq. This gap is a barrier to empowering teacher leaders, and in this case Iraq teacher leaders to propel professional learning networks to optimise students' learning in a digitised age with languages of and for open access, and modernisation. York-Barr and Duke (2004) in their seminal research on teacher leadership found there is a gap in the literature regarding empirical models of teacher leadership with robust data collection (York-Barr and Duke (2004). Wenner and Campbell (2017) inputted the key words 'teacher leadership' into the Education Research Complete Database and yielded 704 results, but only 72 met the criteria for empirical models of teacher leaders and established York-Barr and Duke (2004) recommendations to develop empirical evidence on teacher leadership had not been met. Muijs and Harris (2006) also identified a lack of empirical research into teacher leadership that informs empirical models or critical role descriptions of teacher leadership. Sharrat (2018) identifies when teachers work together with a common set of shared objectives there is a positive and sustainable impact on students' learning and outcomes. Yet Harris and Jones (2019) identify that policy makers prefer drawing on think tanks with cursory knowledge of the learning and teaching taking place rather than drawing on teachers' voices who are doing the learning and teaching in the classrooms. This has meant a huge leak-out of talent and expertise from education systems with a massive Price of Non-Conformance for school leavers who do not have the competences they need to gain sustainable employment in the labour market (Manos, Rabemiafara & Ward 2014).

Students need the competences to propel entrepreneurial economies that add value through product processing which increases Unit Labour Costs and increases Gross Domestic Product (Taysum, 2019). For developing nations with massive debts and negative balance of payments, connecting curriculum Intended Learning Outcomes to the competences required by employers and or required for innovation to mobilise Small and Medium Enterprises, which includes Mama and Papa shops, is absolutely essential. A National Assessment Framework that maps to the competences citizens need to be able to achieve the national priorities and strategic plans is important. This is because developing nation states, like all nation states, requires citizens to have the competences to access middle class benefits by skilling themselves to work themselves out of poverty. Such Intended Learning Outcomes mapped to skill sets and competences required for successful engagement in the labour market and empowers citizens to buy a home and contribute to paying taxes used for building infrastructure for access to clean water supply and sewage systems, and services such as the health service. With these foundations of safety in place, citizens can make informed choices with the resources to support them starting a family.They can also plan to invest in a pension as part of a sustainable future proofing healthy ageing strategy to meet the Sustainable Development Goals (United Nations, 2016) that are kind to people and planet for peace and prosperity for all.

Brown, Benkovitz, Muttillo and Urban (2011) identify the lack of empirical evidence to inform a teacher leadership role description has meant government policy cannot implement teacher leadership role descriptions as knowledge to action policy strategies. Without empirical models of teacher leadership, teacher leaders cannot a) test emergent empirical models of teacher leadership for proof of concept and b) mainstream empirical models of teacher leadership with proof of concept propelled by government legislation. A perpetuation of a lack of empirical studies into teacher leadership prevents emergent empirical models of teacher leadership from being tested for proof of concept and being mainstreamed. This assures a hierarchical top down government policy context that frustrates any ambitions aspiring teacher leaders might have for participating in the co-construction of empirical models/role descriptions of teacher leadership.

The paper presents three objectives to deliver a possible solution to this professional challenge. First, to present an Iraqi empirical teacher leader's job description that maps to a higher tier profession's standards (Goodwyn, 2016). The outcome of this is to mobilise inclusive education to serve diverse communities who are mostly recovering from Post Traumatic War Disorder and now the Covid 19 Pandemic. Second, to explicitly map the role description of teacher leadership to key performance indicators of a higher tier profession to incrementally map progress and impact of progress of developing a professional learning community to support these inclusive processes and practices with psychologies, philosophies and ethics of trust. Third, to connect the role description of teacher leadership's development of professional learning networks to optimising students' learning in a digitised age with languages of and for open access and modernisation. To address these aims we ask three questions. First, how and in what ways can the role of teacher leader in a higher tier profession be scripted to build inclusive education systems for citizens suffering from Post Traumatic War Disorder and in Covid 19 recovery? Second, how and in what ways can the role of teacher leader be scripted to build professional learning communities/networks to support inclusive education system processes and practices? Third, how and in what ways can the role of teacher leader be scripted to develop professional learning networks to optimise students' learning in a digitised age with languages of and for open access and modernisation?

The Iraqi socio-historical context

The Iraqi society is a mixture of different ethnicities including Arabs, Kurdish, Kaldan, Arman and Turikman. Dogan et al, (2017) identify the Iraqi population is a 'true mosaic of different ethnicities' (p.3). 3). Stansfield (2016, p123) stated:

> The cities of Iraq were vibrant, cosmopolitan places displaying an eclectic mix of communities living more or less in harmony – but rather that such identities were the primary social markers in the early years of Iraq's history as a state.

Iraq had six military coups as a Kingdom between 1936 and 1941 (Dodge, 2006), due to desire for power between different political parties. Following the last short military action in 1941, the Kingdom of Iraq had a government led by Nuri al Said (Dodge, 2006) who was a close ally to Great Britain. Iraq witnessed fast development at the time, and the government departments were hugely supported with resources to pursue a forward way of thinking (Cole, 2012). In 1958 a military coup led by Brigadier Abdel Karim Qasim and Colonel Abd-al-Salam Arif ended the era of the Kingdom of Iraq. The military units controlled the capital Baghdad and killed the king and many members of the royal family, as well as the Prime Minister Nuri al Said (Dodge, 2006). That coup marked the end of the Kingdom and the birth of the Republic of Iraq.

During the 1950s and 1960s Western oil companies had developed contracts with host Middle Eastern countries and Venezuela to invest in oil production with Western knowledge, skills, experience, technologies and markets (Bird and Brown 2005; Karsh, Rautsi, and Stowell 2002). The host nation states complied but increasingly felt economically exploited, and some, including Saddam Hussein, the President of Iraq saw the West as colonisers responsible for the partitioning of the Arab world (Karsh, and Rautsi, and Stowell 2002). In 1960 at the Baghdad Conference on September 10 – 14 the

Organisation of the Petroleum Exporting Countries (OPEC) was created by Iran, Iraq, Kuwait, the Kingdom of Saudi Arabia, and Venezuela (Garavini, 2019). Qatar joined in 1961 and terminated membership in January 2019. Indonesia joined in 1962, suspended membership in 2009, and reactivated and suspended it again in 2016. Libya joined in 1962 and the United Arab Emirates in 1967. Algeria joined in 1969 and Nigeria joined in 1971. Ecuador joined in 1973, suspended in 1992 and reactivated membership in 2007. |Angola joined in 2007. Gabon joined in 1975, terminated membership in 1995 and rejoined in 2016. Equatorial Guinea joined in 2017 and Congo joined in 2018 (OPEC, 2019). The discovery of oil in Guyana in 2019 Maybin (2019) reports could see Guyana joining OPEC and could also make Guyana the richest nation in that hemisphere and possibly the world. Maybin (2019, p.1) states:

> History carries a warning for Guyana. The discovery of big oil in other developing nations has exacerbated existing corruption, leading to the new oil wealth being squandered and stolen. It has become known as the oil curse.

Further Jaffe (2020a, p26).

There is evidence that the risk of stranded assets in the oil and gas sector is underpriced in financial markets. Publicly traded Western oil and gas companies are starting to write down assets, opening up the possibility that more rationalisation of value is likely to come. To the extent that large oil companies diversify portfolios to include cleaner energy and carbon sequestration technologies, it could reduce the risk of a sudden cascading change in the stock valuation of these firms and related bond and credit markets. Instead, the vast majority of oil and gas assets that will be stranded are in the control of sovereign states whose national budgets are highly dependent on oil and gas revenues. Thus, the problem of stranded asset risk for the oil and gas sector may be most relevant in markets for sovereign credit as well as risks that go beyond financial losses.

Jaffe (2020b) continues in The Guardian that Iraq, having experienced a change in government in 2019 after huge unrest, is expected to deplete its entire USD62 billiion nest egg.

The Middle East originally gained economic wealth by nationalising the oil industries and reclaiming oil production from the West through negotiations by OPEC (Karsh, Rautsi, and Stowell, 2002). For the first five years OPEC's headquarters were in Geneva, Switzerland and moved to Vienna, Austria in 1965.

By 1975 all the sunshine flooded Middle Eastern states had nationalised their oil production processes (Bird and Brown 2005; Karsh, Rautsi, and Stowell 2002). On two occasions the market became Volatile, Uncertain, Chaotic and Ambiguous (VUCA). This term was first coined by Thurman (1991) when he used 'Violence, Uncertainty, Chaotic and Ambiguous (VUCA)' in a paper given to the US Army War College at a Strategic Leadership Conference.

The first occasion of VUCA was with the Arab oil embargo of 1973 which caused high prices in oil. The members of OPEC called for a strategy for sustainability goals leading to the OPEC Fund for International Development in 1976 (OPEC, 2019). Second the Iranian Revolution of 1979 raised oil prices and the impact on supply of oil was immediate and caused economic decline in many nation states, including the US and UK (OPEC, 2019).

The strategy of dividing a state's different groups to fight against each other prevents them from fighting the true oppressor which may be the colonists in the form of Greeks, Romans, Vikings, British, French and Dutch (Taysum and Murrel-Abery, 2017; Taysum and Arar, 2018). Further, the colonists are arguably colonising as a response to being colonised in the past. Therefore the colonised become colonisers as a way to survive and the triangle between the coloniser, the colonised and the rescuer continues. This cycle is identified by Taysum and Arar (2019) who apply Kartman's Triangle as a new contribution to knowledge to understand the destructive psychologies of human behaviour in civil war and war more generally.

The Iraq-Iran war that broke out in 1980 did not have in the prosecution of war, a recognition that the people were being a) divided up into different groups based on religion, race, ethnicity, gender, and so on, and b) as sub-groups they are fighting each other resulting in fear, pain and suffering in a context of VUCA. The rationale for the prosecution of the 1980 - 1988 war was territorial disputes that included rich oil fields, directly after the Iranian's civil war (Karsh, 2002). Iraq's allies were the Kingdom of Saudi Arabia, Kuwait, other Arab states, the US and Russia (Tikkanen, 2020). Iran's allies were Syria and Libya (Ibid). The war ended with a peace treaty brokered by the United Nations with heavy losses on both sides of 1.5 million deaths in horrific and bloody trench warfare. After international support for Iraq and a UN brokered peace deal between Iraq and Iran, Iraq prosecuted a war against Kuwait in 1990 based on the accusation Kuwait was stealing oil from Iraq using slanting drilling techniques that crossed from Kuwait into Iraq. Kuwait also refused to pardon the debt that Iraq had incurred when borrowing from Kuwait to pay for the war tools for the Iraq-Iran war (Hooten and Cooper, 2019). The war tools were similar to the war tools of WWI in terms of trench warfare, machine guns and barbed wire (Ibid). Iraq's invasion of Kuwait to stop what Iraq claimed was the undermining of Iraq's oil stock, was driven by Iraq's urgent need to reduce the huge debt accrued from borrowing money from Iraqi supporters to pay for Iraqi war tools to win the Iran-Iraq war. Iraq went from being a net creditor to the world from its oil reserves with a lack of external debt, to having crippling debt (Hinrichsen, 2019). The CIA (2007, p.1) affirm this with Iraq Economic Data 1989-2003:

> Iraq's indebtedness has been the result primarily of the war with Iran. Iraq traditionally had been free of foreign debt and had accumulated foreign reserves that reached $35 billion by 1980. These reserves were exhausted in the early stages of the war with Iran. It is estimated that from 1980 to 1989 Iraq's arms' purchases alone totalled $54.7 billion. Following the war, Iraq was faced with the dilemma of paying off short-term debts to western creditors estimated between $35 to $45 billion at high interest rates. However, the Regime resisted

western attempts through the International Monetary Fund (IMF) and World Bank to reschedule the debt primarily because Baghdad believed it could negotiate more favourable terms dealing with countries bilaterally.

In 1990 – 1991 thirty-five allied nations including the US, the Kingdom of Saudi Arabia, Egypt and the UK went to war with Iraq with military forces. The conditions in Iraq after the war were very hard, for example the mortality rate of children under fives years old from 1991 – 1998 was 227,000 more than the expected benchmarked model. The huge increase of deaths was at the highest with those of lower educational achievement (Garfield, 1999). The deaths were caused predominantly by diarrhea and respiratory illness with underlying causes being a lack of access to: clean water; operational sewage systems; high quality food (Ibid). Garfield continues that the oil for food programme agreed in 1998 increased access to supplies and reduced the mortality rate, but data is difficult to access from this period to validate this claim.

The Iraq Saddam Hussein regime was increasingly backed into a corner with rising debt, and externally controlled oil revenues. The US and the UK grew uneasy that Iraq was developing weapons of mass destruction, was guilty of committing human rights abuses that contravened the UN Declaration of Human Rights, and was connected with terrorism and the 9/11 attacks (US Department of State, Bureau of Public Affairs, 2013). The UN Security Council found the Saddam Hussein regime was a threat to bordering countries and the world community and Resolution 1441 was adopted unanimously on November 8, 2002 which underpinned the invasion of Iraq in 2003 by allied forces (United Nations Security Council, 2002).

After the invasion of Iraq in 2003, Iraq was left with no post war recovery plan to navigate the turbulence from Violence, Uncertainty, Chaos and Ambiguity (VUCA) (See the article in this special edition journal looking at harsh and generous post war recovery plans (Taysum, 2020)). The VUCA included sectarian violence between Muslim Shia and Muslim Sunni. After the invasion in 2003 no strategies to reconcile these opposing interests were advocated by the state, and developed by the education system's national assessment framework. Neither was this delivered by empirical teacher leadership models who had access to critical resources including text books that could be decoded with thinking tools to help students make choices about what counts as good faculty of judgement (See article on Mayssa's critical framework in this special edition journal (Haider, Canfarotta, Altae and Taysum, 2020)). As Taysum (2019) identifies no opportunity to develop the social contract between the state, the force of the common whole, the economy and any independent legislators was offered through the education system and its epistemological underpinnings. In other words there was no education policy that offered citizens the chance to develop their ability to make judgements about what counts as faculty of good judgement in a context of 'Post Traumatic War Syndrome' (PTWS). Therefore citizens could not develop the thinking skills or competences for adopting and/or adapting and/or developing a road map to achieving the Sustainable Development Goals to: eradicate poverty; propel entrepreneurial economies; celebrate Iraq's noble and rich cultural heritage; recognise and honour different groups within Iraq and beyond Iraq'a borders, that do no harm to themselves or others; develop philosophies of trust and inclusion with SDG 4.7 (United Nations, 2016, p.1):

> By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human

rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

The ongoing wars continued to divide the peoples of the gulf region (linked to Iran and nuclear threat and the oil in the gulf) and greatly weakened the Iraq central government grip on the whole country. Iraq could not and still cannot meet the needs of its people because the infrastructure has been badly damaged during the VUCA. As Stansfield (2016, p. 126) identify the people of Iraq simply could not understand:

> Why were communities that once lived in peaceful harmony, according to the historical literature on Iraq' society, now subjecting each other to ever increasing levels of brutality and indiscriminate violence.

In the confusion and lack of opportunity for the people of Iraq to explore what counts as good faculty of judgement and then exercise good faculty of judgement as a cohesive and inclusionary society, The 'Islamic State' of Mosul in 2014 emerged and exercised all sorts of brutal acts on the people of Mosul. This civil war served to divide the people of Mosul and allowed the diminishing of anyone or any groups who were seen as opposing the 'Islamic State's' extremist agenda (Woods, 2015). De Gruy (2005, pp. 116–117) states that those whose ancestors were slaves have 'a legacy of trauma'. De Gruy (2005) identities that Post Traumatic Slave Syndrome (PTSS) is a cultural heritage of slavery. Those with PTSS are vulnerable to replicating the learnt acts of the slave masters towards others, without having developed the dispositions of the slave owners. Similarly the people of Iraq have a legacy of trauma from the wars they did not prosecute because the prosecution of war was made by the Sadam Hussein Regime and Islamic State. Those with Post Traumatic War Syndrome, like PTSS, are vulnerable to replicating the violent acts of war towards others, without having developed the dispositions of the war mongers/war monsters. The war mongers were full of avarice and unrighteous power which resonates with Plato (2017) some 2000 years ago in Timaeus, p. 16376:

> Thereupon one of the priests, who was of a very great age, said: O Solon, Solon, you Hellenes are never anything but children, and there is not an old man among you. Solon in return asked him what he meant. I mean to say, he replied, that in mind you are all young; there is no old opinion handed down among you by ancient tradition, nor any science which is hoary with age...

The tragedy is that the wars have left many Iraqi children orphans with PTWS and many refugees who no longer have their elders to pass on the cultural and or religious heritage. For example, the faith of Islam states: To each of you We prescribed a law and a method. Had Allah willed, He would have made you 1 nation [1 religion] to test you in what He has given you; so race to good. To Allah is your return all together He will inform you concerning that over which you used to differ [Quran 5:48]

So the wise know that the challenge presented in the Quran is to live peacefully together though we are not one nation and not one religion. Of course we are all sinners, and yet Allah, God, still loves us. Perhaps he challenges us to love those

who do not share our nationality or faith so that we understand how Allah can love us, because His love is perfect. Education is key to teaching citizens how to develop the faculty of good judgement so that we can make good choices about our lives. Therefore curriculums need to offer the thinking tools to learn how to learn so that each citizen can develop understandings of the principles of good judgement and apply these principles to their faculty of judgement and test for proof of concept to see if the faculty of judgement was good.

Hatem Issa and Jamil (2010) identify that post 2003 Invasion there are poor quality inputs a lack of teacher training and a lack of teachers. The Ministry of Planning's (2018 p. 13) National Development Plan 2018-2022 with a focus on education states:

> Federal Budget Law for 2017 allocated USD 5 billion for military expenditure and USD 19 billion for security and defence – a total of 22.6% of public spending, compared to 9.3% for education and 3.8% for health. The impact on education and high education indicators has been evident in e.g. the Human Development Report 2016: Iraq scored 0.649 on the Human Development Index (middle human development country) and ranked 121st from 180 countries; the mean years of schooling in Iraq were 6.6, compared to 10.1 in Jordan, 8.8 in Iran, 8.6 in Lebanon and 7.3 in Kuwait.

The Iraq Ministry of Planning's (2018) 'National Development Plan 2018-2022 continues that there is a deficit in school buildings excluding those under construction is 8147 with overcrowding in classrooms. Most areas of Iraq continue to suffer from multi-dimensional poverty. Improving the effectiveness and efficiency of the education system to propel local entrepreneurial economies and mobilise economic growth through compulsory education, vocational education and life-long learning is very challenging. A lack of modern curricula, competence based national assessment framework and empirical teacher leadership job descriptions to boost the skills sets of inclusionary labour markets reveals much still needs to be done in the education system. Two Workshops on the UNESCO website offer opportunities for raising Iraq in the Human Development Index, perhaps a more interesting way of assessing the quality of education than PISA. The first was Autumn 2020 'Developing Iraq's Next National Education Strategy' (UNESCO, 2020a). The second was on developing Competency Based Training in Iraq in November focused on building the skills of graduates to benefit from employment opportunities as part of UNESCO's ongoing efforts to support the 'Centre of Vocational Excellence in construction skills supporting labour market outcomes' and 'Job Creation for Youth in Mosul' with financial support from the Government of Japan *UNESCO, 2020b).

The paper now turns to the best that has been thought and said about empirical teacher leader model/role description. To do this the constructs of the research questions are critiqued to address the paper's objectives and the professional challenge.

An Empirical Model/Role Description of teacher leader in a higher tier profession

York-Barr and Duke (2004) in their seminal research on teacher leadership found there is a gap in the literature regarding empirical models of teacher leadership with robust data collection (York-Barr and Duke (2004). Muijs and Harris (2006) also identified a lack of empirical research into teacher leadership that informs empirical models or critical role descriptions of teacher leadership. Wenner and Campbell (2017) conducted a second full and comprehensive review into teacher leadership by inputting the key words 'teacher leadership' into the Education Research Complete Database and yielded 704 results. Only 72 results met the criteria for empirical models of teacher leaders and established York-Barr and Duke (2004) recommendations to develop empirical evidence on teacher leadership had not been met. Muijs and Harris (2006) also identified a lack of empirical research into teacher leadership that informs empirical models or critical role descriptions of teacher leadership. Sharrat (2018) identifies when teachers work together with a common set of shared objectives there is a positive and sustainable impact on students' learning and outcomes. Yet Harris and Jones (2019) identify that policy makers prefer drawing on think tanks with cursory knowledge of the learning and teaching taking place rather than drawing on teachers' voices who are doing the learning and teaching in the classrooms.

The role description to emerge from York-Barr and Duke (2004) and Wenner and Campbell (2017) is to deliver on four objectives:

function in professional learning communities/networks
affect optimising students' learning;
contribute to school improvement;
inspire excellence in practice;
empower stakeholders to participate in educational improvement.

This description is affirmed by Goodwyn (2016) identifies the best teachers mobilise learning communities to build capacity for the best learning and teaching that has the biggest impact on optimising the learning and learning outcomes of students from all backgrounds. Moreover, Taysum et al (2019) argue the learning and competences acquired by meeting curriculum Intended Learning Outcomes, need to connect to what Obama (2008) calls students' personal narrative capital for the jobs and lives they want. Teacher leaders need to build relationships hallmarked by psychologies, philosophies and ethics of trust in their education organisation's communities/networks to mentor their network of professional educationals to build relationships hallmarked by psychologies, philosophies and ethics of trust with their students in the classroom. Building such relationships helps the educational professional to empower young people to develop their narrative capital and helps them to script a road map to successful engage with the labour market and access middle class benefits. The road map includes Key Performance Indicators of their Assessment for Personal and Social Learning mapped to gaining the competences of their nation's qualifications framework (Taysum, 2019; UNESCO, 2020). This maps to the competences needed in the labour market located within the quadruple helix, but not narrowed to competences needed now, these are competences of learning how to learn so that citizens have the thinking tools to develop the competences required for the future. This maps to the Competence framework of Empowering Young Societal Innovators for Equity and Renewal that is mapped to the European Qualifications Competence Framework (Canfarotta et al, 2020; Taysum et al, 2020). Perhaps one of the most important competences young people will need is to be resilient when there is dissonance between their personal values that includes all faiths and none, and the societal values. Societal values include the values of all sub-groups including the marginalised and vulnerable members of the quadruple helix. In a context of civil war that can start

because sub-groups are divided and see each other as threats to a good life rather than new partners who can build better lives in an inclusive and sustainable social contract overcoming dissonance is very important. An Empirical Model/Role description of a teacher leader needs to include clear level descriptors of these competences so that teacher leaders can help their students evaluate their progress from 'working towards' to 'fully met' particularly in developing the competence of understanding different values and ideologies and reconciling dissonance and even Violence, Uncertainty, Conflict and Ambiguity (VUCA) between different positions, to build new philosophies, psychologies and ethics of trust in partnerships for peace and prosperity (United Nations, 2016; Taysum, 2019) .

An Empirical Model/Role Description of teacher leader to build inclusive education systems for citizens experiencing clashes between self-interest and joint-interest in a context of VUCA

Furlong's maximisation of reason in the re-tooling of the discipline of education helps theorise what kinds of reason is valued in the empirical role description of how teacher leaders realise the 'what' of the empirical model/ role description of teacher leadership. In deciding what counts as good faculty of judgement, this is of interest. Maximisation of reason can be understood by exploring contractarianism (Gauthier's Utilitarianism) and contractualism (Gautheir's contractarians). Contractarianism following Hobbes is where the knowledge of 'what is' (epistemology) is that people behave motivated by self-interest and the best strategy to optimise their returns on self-investment as intent and acts is to act morally where a government authority scripts rules in a contract that maximises joint interests. Where contractarianism breaks down Hobbes suggests the people need to start again with a new contract. Hobbes refers to the leviathan which might be called Ate in Greek mythology, or Satan in Islamic, Jewish and Christian holy texts, and this is when 'leviathan's' self interests are sought in self utility maximisation or egoism. Perhaps Hobbes knew the authorities of his time might not be aware of the origins of 'leviathan' and thus was not subject to the authorities' denial of scientific evidence because they did not realise it was an attack on the characters of the elite who served their own interests rather than serving the interests of the people they governed.

Those that challenged the order of the day, for example Copernicus whose new contribution to knowledge was that the Earth revolved round the sun, was seen as a threat to the epistemology of the authority of the time. This authority would then deny the science because it clashed with their personal ideologies which was the basis of their power over others in society and their elite status. Copernicus was told to redact his scientific results or be executed, which might even be made to look like suicide or an accident. Copernicus did redact the scientific evidence so the authoritative governance system could keep its power. So although Gauthier suggests Hobbes was skeptical of divine or Utopian law, the evidence for this argument is not convincing. Perhaps what is more convincing is the temptation of people to follow egoism and the metaphorical ways of the leviathan resulting in a rejection of the divine or Utopian law, or adopting a herd-like panic for survival because a hostile group has prosecuted a war against them. In such a context of Violence, Uncertainty, Chaos, and Ambiguity (VUCA) the survivalist base nature, absent of trust and full of self-interests trumps their aesthetic potential. In seeking self interests the rationale to satisfy base natures comes to the fore confirming a contractarianism epistemology, but with different justification to the one Gauthier provides.

To recognise the motives of people in a context where speaking truth to power is dangerous, Pring (2020) suggests understanding and giving respect to the intersection of faith with divine wisdom, and reason (and different kinds of reason

and the different kinds of faculty of judgement underpinning those different kinds of reason, and resulting from those different kinds of reasons identified by Furlong) is important. Understanding the different epistemologies that shape what counts as faculty of judgement at the intent (potential) and act (kinetic) phase of humans development must be explored as part of an empirical model/role description of a teacher leader. Further, without an empirical teacher leader model that considers the underpinning logic, ethics and empirical evidence base for what counts as faculty of judgement in an education organisation located within an education system the human development is reduced to memorising disciplinary knowledge in a kind of Neuro Linguistic Programming, affirmed by text books and set answers with no debate in the classroom. This can create dissonance within a person, a kind of schizophrenia that may be at the root cause of poor mental health and fear. If this fear begins to dominate a culture it can be the cause of VUCA, civil war and even war between neighbours.

Where contractarianism breaks down as a result of i) the 'legal' if irrational removal of the rules of the social contract that allows egoism as found in neo-liberalism (Taysum, 2019), or ii) as a result of Violence, Uncertainly, Chaos and Ambiguity (VUCA) or war, Hobbes suggests starting again with a new government, and a new contract.

Contractualism on the other hand is the respect for the dignity of each human being with moral principles that each member of the contract explicitly knows that do no harm to the self or the other and follows the epistemology of Kant's (1785) Groundwork of the Metaphysics of Morals; explored latterly by Rawls, in Chapter 11 of Taysum (2019) and is the inspiration for this journal. The moral prime/principles that guide 'intent for acts' and 'acts' could have been/have been explicitly written as part of a member of the contract's meeting scripted Intended Learning Outcomes as part of a school curriculum. By meeting curriculum Intended Learning Outcomes that map to a national competency framework, each member of the contract can provide the public justification, using their good faculty of judgement (that they have tried and tested and believe to be full of discernment/wisdom), of the contract's ethical framework that is subject to robust moral inquiry, probably by a government's inquiry by all party committee system.

The inquiry is the physical manifestation of the contractual commitment to the generation of new knowledge in a habit/strategy/duty to search for truth. The search is critical in that it compares and contrasts all views of society. Being critical is important and starts with asking good questions about old problems in the quadruple helix. In a context of marginalisation, institutionalised racism, gender discrimination or oppression of people with any of the protected characteristics of the UK Equality Act (2010) all voices must be heard in contractualism and must contribute to the questions. Finally there needs to be tolerance for opposing views that do not harm to the self or the other. These opposing views may even be in conflict and this means inclusionary regimes of social justice must operate hallmarked by open access participatory grass roots up data bases of Science with and for Society (Horizon, 2020; MoRRi, 2017; United Nations, 2016). Such a review of the best that has been thought and said is where the search for an Empirical Model/Description of Teacher Leadership rests now within society's 'quadruple helix' (Schütz, Heidingsfelder, and Schraudner, 2019). The four sub-groups of the quadruple helix are:

i)   scientific knowledge (Science with and for Society) Higher Education Systems and education systems;
ii)   the government elected on the promises they make in manifestors;

iii)   business (in a context of an industrial age and digitised age in which are located small and Medium Enterprises including Mama and Papa shops, and Giant share holder corporations);

iv)   the people often grouped with social media that mobilises different kinds of knowledge including fake news making it all the more important for citizens to develop their faculty of judgement to discern good news from bad news.

So the next part of the review of the literature as part of the project to develop an empirical model/role description of teacher leader to be tested for proof of concept, is to consider the viability of policy makers setting agendas to do this.

Kahan (2014) and Nisbet, Cooper and Garrett (2015) found that when policy makers were presented with scientific evidence, their judgements were influenced by whether the empirical statements aligned with their political beliefs. These were the political beliefs of the elite and not the political beliefs of the force of the common whole as part of a social contract. Parkhurst (2017) identifies scientific denialism prevents empirical evidence informing policy. So in this case, scientific denialism prevents an empirical teacher leader model/role description being developed, tested for proof of concept by the education profession and then mainstreamed, if it does not agree with the colour of the Chair of the board of the policy makers' ideologies. For example in England and Wales the Advanced Skills Teacher was introduced by the Labour Government in 1997. The Advanced Skills Teacher aligns with the Empirical Model/Job Descriptor of Teacher Leader from Wenner and Campbell (2017) as can be seen In Table 1: Wenner and Campell's Empirical Model of Teacher Leader (on left) and The Dictionary of Education's (2014) definition of an Advanced Skills Teacher (on right).

Table 1: An Empirical Teacher Leadership Model Wenner and Campell's Empirical Model of Teacher Leader (on left) and The Dictionary of Education's (2014) definition of an Advanced Skills Teacher (on right).

Wenner And Campbell (2017) Empirical Model of Teacher Leader	Dictionary of Education (2014) definition of Advanced Skills Teacher England & Wales 1997-2013
Function in professional learning communities/networks	Leading professional research groups or working parties
Affect optimising students' learning;	Teaching 'model' lessons with staff observing and observing lessons and advising other teachers on good classroom practice and lesson planning
Contribute to school improvement;	Supporting professional development through performance management and quality assurance systems

Inspire excellence in practice;	Producing high-quality teaching materials for use in their own and other schools
Empower stakeholders to participate in educational improvement.	supporting and mentoring teachers who are experiencing difficulties

Goodwyn (2017) argues the Advanced Skills Teacher (AST) model was mocked by the media, calling ASTs Super Teachers likened to comic pictures of Super Heros. The Conservative Government abolished ASTs with no consultation in 2013. In 2014 The Conservative Government launched The Specialist Leaders of Education (SLE) route with no empirical evidence for the model. The SLE was typically for a head of department or assistant headteacher who wanted to get experience of school-to-school support. Unlike ASTs, SLEs do not get any extra salary.

In 2015 the Conservative Government introduced the National Teaching Service to send a 'crack team' of 1500 super-teachers to failing schools to raise standards (Williams, 2014). The scheme had no empirical evidence to support it, and was arguably ideologically driven. The scheme was abolished in 2016 because it could only recruit 54 teachers of the target 5000 (BBC, 2016). It remains unclear why The Conservative Government abolished the Labour Government Initiative of ASTs without providing a rational argument and without providing an empirical model/role description of teacher leader.

Governments have this power to remove the professional autonomy from the teaching profession because teaching does not have the autonomy of a higher tier profession. Higher Tier professions include Doctors and Lawyers who do not get government interference. This is mainly because Governments do not know how to conduct brain surgery for example, or how to morally prosecute a criminal in the name of justice. Government can control education organisations' budgets, education curriculums Intended Learning Outcomes, and the extent to which Initial Teacher Training programmes develop critical autonomous top tier professionals.

Empirical Model/Role Descriptor to optimise students' learning in a digitised age with languages of and for open access and modernisation

The literature reveals that questions have been asked about the Empirical Models of Teacher Leaders which connects to Stage A of Table 2 A Blueprint for Character Development for Evolution (ABCDE) that maps to the competences of an Empirical Teacher Leader Model. A literature review has been carried out which maps to Stage B of ABCDE of the incremental Model that Teacher Leaders, students and stakeholders can map their progress against in the development of their participation contractualism. What is now required are robust research agendas and methods aligned to Stage C of ABCDE. Empirical Models of Teacher Leaders can emerge aligned to stage D of ABCDE. These Empirical Models of Teacher Leader can be tested for Proof of Concept to reveal prime principles for the maximisation of 'the rational' of the knowledge to action strategies that work. These principles, when identified, can be applied in different contexts so that they are culturally relevant. This enables them to be mainstreamed through policy makers working with grass roots up groups

of teacher leaders. ABCDE is presented in Table 2 and maps ABCDE to the Competences of the European Qualifications Framework taken from Taysum et al (2020).

Table 2 The incremental ABCDE mapped to Incremental Levels and their Competences of European Qualifications Framework (European Commission, 2020)

Competency from ABCDE and validated through APSL	Competency European Qualifications Framework (EQF)
A.Competency to ask good questions.	Level 1 of the EQF Competences 'Basic skills required to carry out simple tasks.
B.Competency to interrogate the best that has been thought and said about the constructs of the questions.	Level 2 of the EQF Competences 'Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools'
C.Competency to design and implement methods that are robust with high quality dimensions that yield baseline data and impact data	Level 3 of the EQF Competences 'A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information'.
D.Competency to develop hypotheses from data that can be tested for proof of concept	Level 4 of the EQF Competences 'A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study'.
E.Competency to extrapolate prime principles from hypotheses with proof of concept.	Level 5 of the EQF Competences 'A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems'.
Competency to apply ABCDE in the Quadruple Helix to achieve ET2020 four Strategic objectives and SDG 4.7 which Empowers Young Societal Innovators for Equity and Renewal (EYSIER) to achieve all SDGs.	Level 6 of the EQF Competences 'Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study'.
Competency to train teachers and teacher leaders to implement ABCDE and develop leadership to build capacity with policy makers in the quadruple helix to mainstream ABCDE with APSL to EYSIER	Level 7 of the EQF Competences 'Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields. '
Competency to teach the leaders to implement ABCDE with APSL to EYSIER	Level 8 of the EQF Competences 'The most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice'.

Empirical Models of Teacher Leaders can develop Assessment for Personal and Social Learning. At Stage A the teacher and young person or young people (YP) identify curriculum Intended Learning Outcomes (ILOs) which map to competences and their level descriptions. The teacher and YPs develop questions over a stated time period to help them address the questions related to their personal and social contexts. The second Stage B is where the YP collect base line data and information from the best that has been thought and said, supported by their teacher, using technologies, to help them

address questions that address the ILO of the curriculum that relates to their personal and social contexts. The students engage in a task or project that acts as an intervention to their current personal and social context within a clear framework (James, Black, McCormick, & Pedder, 2007). These may draw on the classics, and stories from different epochs that reveal patterns of human behaviours and attitudes that students can analyse and relate to their own lives in a safe space (Taysum & Canfarotta, 2019).

At Stage C, the teacher may provide summative and formative feedback on assessments submitted that map to the curriculum ILOs (standards) that considers the students' personal learning in a social context. The students identify changes between what they knew before they engaged in the task(s) and what they know now. They can identify gaps in their knowledge and therefore plan for their next learning. This may include developing methods to gain new knowledge to understand the ILO in relation to their personal and social experiences and contexts.

Learning how to learn demonstrated through creative responses to challenges to meet ILOs, develops transferable skills that are important to future employers. The fourth Stage D of the APSL framework is the YP and teacher critically reflect on the feedback and the YP make logical, critical, moral and ethical discerning judgements and hypotheses that they can test for proof of concept. They can then develop theories of change in their own personal and social thinking (intentions) that inform their acts. They can do this by undertaking further appropriate inquiry based learning to meet the ILOs or next ILOs and transferable skills for problem-solving in complex personal and social contexts (Dewey, 1909; Pring, 2000). They can do this by starting at A again. At A the young people can formulate a professional challenge mapped to the ILO, but this time their base line will be in a different place because of their prior Assessment for Personal and Social Learning (APSL). Their formulation of the professional challenge mapped to the next curriculum ILOs may include theories of change developed from their previous learning that contain some understanding of universal principles that underpin their theories of change. In the framework APSL Stage E is 'develop theories of change underpinned by universal principles understood on a deep level that when implemented can be evaluated for impact'. This evaluation of impact can follow Stage A such that Stage A and Stage E are integrated. The empirical Model for Teacher Leaders:

Using Assessment for Personal and Social Learning (APSL) they can:

i)   explicitly participate with intention and acts in an ethical social contract between citizens, the economy, the government and independent legislator drawing on Open Access Bottom up SwafS knowledge bases;

ii)   explicitly articulate how and in what ways participation with a social contract engenders inclusionary regimes of social justice and the precautionary principle for all;

iii)   build effective co-operation between science and society with leaders of the four spheres of the quadruple helix using technologies of a digitised age;

iv)   interact with open access Bottom up SwafS knowledge bases that foster recruitment of new talent for scientific careers in Science Technology Engineering and Maths, the Social Sciences and Arts and Humanities by pairing scientific excellence with social awareness, responsibility and eliminating intersectionalities of discrimination (gender, race, protected characteristics of Equality Act of 2010) by

accessing Massive Online Open Access Courses and being mentored by VSO teachers that may include retired teachers.

Table 3 Assessment for Personal and Social Learning (Taysum, 2019, p.58)

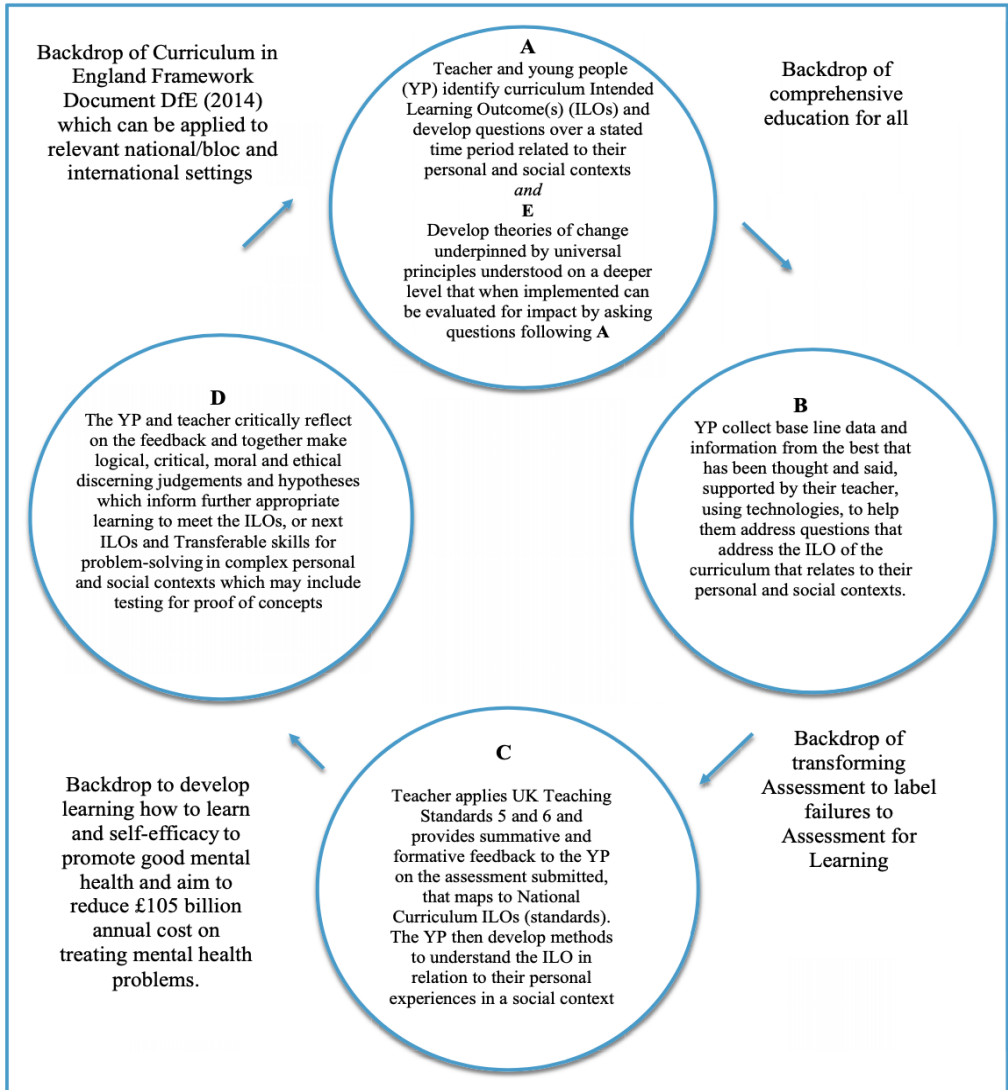## 58   Education Policy as a Roadmap for Achieving the SDGs

Backdrop of Curriculum in England Framework Document DfE (2014) which can be applied to relevant national/bloc and international settings

A
Teacher and young people (YP) identify curriculum Intended Learning Outcome(s) (ILOs) and develop questions over a stated time period related to their personal and social contexts
and
E
Develop theories of change underpinned by universal principles understood on a deeper level that when implemented can be evaluated for impact by asking questions following **A**

Backdrop of comprehensive education for all

D
The YP and teacher critically reflect on the feedback and together make logical, critical, moral and ethical discerning judgements and hypotheses which inform further appropriate learning to meet the ILOs, or next ILOs and Transferable skills for problem-solving in complex personal and social contexts which may include testing for proof of concepts

B
YP collect base line data and information from the best that has been thought and said, supported by their teacher, using technologies, to help them address questions that address the ILO of the curriculum that relates to their personal and social contexts.

Backdrop to develop learning how to learn and self-efficacy to promote good mental health and aim to reduce £105 billion annual cost on treating mental health problems.

C
Teacher applies UK Teaching Standards 5 and 6 and provides summative and formative feedback to the YP on the assessment submitted, that maps to National Curriculum ILOs (standards). The YP then develop methods to understand the ILO in relation to their personal experiences in a social context

Backdrop of transforming Assessment to label failures to Assessment for Learning

Fig. 3.1.   A Framework for Assessment for Personal and Social Learning Taking a Deweyen Perspective.[4,5]

Summary of Literature Review and Synthesied Empirical Model of Teacher Leadership to be tested

The Empirical Teacher Leader Model to be tested for proof of concept in the Iraqi context is presented in Table 4 which is a synthesis of :

i)   The Model from Wenner and Campbell (2017) synthesised with the Advanced Skills Teacher Model that mobilises inclusive education for communities recovering in a Post Traumatic War context who are likely to have Post Traumatic War Syndrome.

ii)   Empirical Model of teacher leadership that can i) articulate the psychologies, philosophies and ethics of ABCDE of a social contract, and ii) mobilise this knowledge in professional learning networks to support students' narrative capital required to develop the competences and resilience to reconcile opposing, even conflicting personal values and societal values in a quadruple helix.

iii)   Empower Professional Learning Networks with the competences to empower students' narrative capital developed by the competency to apply Assessment for Personal and Social Learning to create new solutions to old problems including propelling entrepreneurial societies starting with Mama and Papa shops.

Table 4 Empirical Model of Wenner and Campbel and AST Teacher Leadership implementing ABCDE with Assessment for Personal and Social Learning

Wenner And Campbell (2017) Empirical Model of Teacher Leader	Dictionary of Education (2014) defintion of Advanced Skills Teacher England & Wales 1997-2013	Synthesised Empirical Model of Teacher Leadership to be tested.
Function in professional learning communities/networks	Leading professional research groups or working parties	Build psychologies, philosophies and ethics of Trust in Contractualist Professional Learning Communities using ABCDE.
Affect optimising students' learning;	Teaching 'model' lessons with staff observing and observing lessons and advising other teachers on good classroom practice and lesson planning	Role model lessons and give constructive feedback informed by observations lessons that optimise students' development of narrative capital applying Assessment for Personal and Social Learning to innovate new solutions to old problems and propell entrepreneurial economies
Contribute to school improvement;	Supporting professional development through performance management and quality assurance systems	Mobilise ABCDE to ensure School Improvement is realised using the incremental mapping to a Competency Framework (EQF, 2020)
Inspire excellence in practice;	Producing high-quality teaching materials for use in their own and other schools	Share lesson plans that empower students to lead their own learning with Assessment for Personal and Social Learning.
Empower stakeholders to participate in educational improvement.	supporting and mentoring teachers who are experiencing difficulties	Applying ABCDE to empower stakeholders through high quality mentoring to engender participation in educational improvement that optimises learning with digital skills for a digitised age with languages of and for open access and modernisation

Methodology

The research is located within the interpretivist approach. The interpretivist approach acknowledges that human beings have their own meanings of reality and that these meanings are constructed. Cohen et al (2001) state: 'interpretive researchers begin with individuals and set out to understand their interpretations of the world around them' (p.23). For interpretivists it is not possible to have an objective reality because perceptions are different for different individuals. At best articulated realities can be represented in research and synthesised with arguments rehearsed in the literature. This process progresses knowledge and understanding but is clearly problematic because there are so many conceptualisations of the truth. This is in direct contrast to a positivist approach where the researched are the objects and the affective domain is leapfrogged because it is not tangible and and because it is challenging to measure (Coleman and Briggs, 2002).

This study analyses the rich qualitative biographical narrative data from 6 Professionals in the Iraqi Educational System; 2 schoolteachers, 2 headteachers, 2 subject inspectors which draws on Merten's recommended sample size for examining the phenomenology of empirical models of teacher leadership in Iraq (Mertens, 1988). Through Dey's (1983) content analysis, describing, pattern matching and connecting, and categorization the characteristics of empirical teacher leadership models in operation in the Iraqi educational system could be explored (Patton, 2002). On reading Furlong and Oancea (2005) it became apparent that reporting the findings of these patterns was important because they generated new knowledge that would have a long term impact on a range of users, on quality and on performance of teacher leadership and building capacity for teacher leadership with an Empirical Iraq Teacher leadership Model/Role Description.

The empirical evidence was collected through semi-structured interviews. The semi-structured interview has been selected as a research tool because the interview is a life story that provides a rich detailed narrative that is a representation of an individual's reality. Trustworthiness of the empirical data was achieved through respondents providing respondent validation of the transcripts by reading through the transcripts and providing additional notes to validate meanings. In this way triangulation is used to strengthen the qualitative findings (Denzin and Lincoln, 1994).

An important ethical issue is that of informed consent. The interviewees were briefed in full as to the purpose and scope of the research. The interviewees will remain anonymous and where ever possible confidentiality is assured (British Educational Research Association, 2011; American Educational Research Association, 2010)

Findings

The findings test the Model from Wenner and Campbell (2017) synthesised with the Advanced Skills Teacher Model that mobilises inclusive education for communities recovering in a Post Traumatic War context who are likely to have Post Traumatic War Syndrome.

Understanding the role of teacher leader to build an inclusive education system in Mosul, Iraq

An Inspector of Mosul Schools Ali stated: 'I am not fully aware on how to support our education system in my role, I only follow the instruction of the MoE, which is something that I have been doing for so many years'. Dalya an Inspector stated: "I think we as inspectors neither have the knowledge nor the required training to participate in building (capacity for teacher leadership) an inclusive education system"

Headteacher Bushra questioned the value of urging teacher leaders to play a role in developing teacher leadership to upgrade the education system:

> we have more than 30,000 dislocated students that need urgent educational support, so let's sort this massive problem first then you can come and ask me to play a part in the system upgrade".

Headteacher Sami stated:

> how do they [the MoE] expect us to lead on updating the education system or creating an inclusive system if there is no policy to follow … believe me I have been looking for a single document about this but I could not find any … I even asked the inspectors who struggled to find any answers … it seems that we [the leaders] are all in the same boat."

Teacher Mohammad regarding developing teacher leadership stated:

> I sometimes feel sorry for our headteacher and the visiting inspector, they seem unable to support us … don't get me wrong it is not their fault, they are not being trained to do their job in the current education climate" "I think we as inspectors neither have the knowledge nor the required training to participate in building an inclusive education system"

Teacher Noor stated:

> we [the teachers] are being left on our own in this [the current education status], the inspectors visit us regularly, but they never bring any new ideas … I believe they have no up-to-date information to pass on to us in order to support us in building our education system … above all we have enough problems in our schools since the liberation of the city, which we need also to address."

The inspectors, headteachers and teachers identify there is no policy or empirical model for teacher leader and no road map for developing inclusive schools in a Post Traumatic War Zone.

There is no evidence of implementing any aspect of Empirical Model of Wenner and Campbel and AST Teacher Leadership implementing ABCDE with Assessment for Personal and Social Learning to develop inclusive schools in Mosul's Post Traumatic War Zone.

Building Professional Learning Networks

However, all participants identified they were ready to implement an empirical Model of Teacher Leadership to build professional learning networks to support inclusive processes and practices. Inspector Ali stated: "building a cohesive learning community would result in the rebuild of the wider community, everyone looks ready to participate in supporting an exclusive education system." . Inspector Dalya stated: "I believe that we as inspectors can guide the teachers towards a more cohesive context so they could overcome the disastrous consequences of the Islamic State control of the city.. it's time to do it". Headteacher Bushra articulated:

> we are all willing and ready to rebuild our [education] system...by 'we' I mean the teachers, the school leaders, the inspectors and the parents are all in this boat. Something needs to happen and it will only happen if we all work together

Headteacher Sami said:

> I think it is our [school leaders] job now to restore both the physical and the spiritual cohesion. Our teachers were physically and mentally exhausted under the Islamic State, I used to look at my teachers in the early days after the liberation of the city and tell myself...My God, these teachers need help to be themselves again.

Teacher Mohmmed stated:

> every time I recall the days that I used to go to school at the time of the Islamic State I feel shivers...it was horrible, we were so defragmented. We need to get together and rebuild what was ruined.

Teacher Noor stated:

> the teachers need more help to take the next step towards regathering their efforts to contribute in creating a sound and effective education system. They [the MoE] should make use of the teachers' will to help and find the appropriate method to overcome the current chaos.

The evidence reveals there is an appetite for applying The Empirical Model of Wenner and Campbel and AST Teacher Leadership implementing ABCDE with Assessment for Personal and Social Learning to develop inclusive schools in Mosul's Post Traumatic War Zone.

Empirical Model of Teacher Leader building psychologies, philosophes and ethics of trust in Professional Learning Networks to optimise learning in and for a digitised age with languages of and for open access and modernisation.

Inspector Ali said,

the main focus in my opinion should be on two issues; the curriculum requirement and the social requirement … I mean we have work to do within school boundaries and some outside school boundaries. Within schools we need to train teachers on being digitally skillful in order to implement the curriculum appropriately and we also need them [the teachers] to prepare the students in the same way. Outside schools we need to look on the current social needs and use that to inform our in-school work. It is a comprehensive task and we have to look at the big picture to meet our objectives

Inspector Dalya stated:

we need to pay attention to the implementation of the latest methodology and encourage more embedding of Information Communication Technologies (ICT) [digital skills for a digitsed age] in teaching. Our teachers need to be more prepared for the current and the upcoming challenges. There is a gap in this respect because our teachers have not been exposed to such skills before and we need to help them in this. In the end it is the requirement of the new curriculum and we have to address it.

Headteacher Bushra articulated:

I believe digital skills are essential and should be given priority…they [education officials] should pay special attention to this matter if they want schools to effectively implement the new curriculum and prepare the students for the challenges that are coming their way in the all new education and work atmosphere.

Headteacher Sami said:

if we want our future generation to play an effective part in rebuilding the country then we have to prepare them for the job market so they could contribute to the process. To do this we need to equip them [the students] with the necessary digital skills in addition to the English language skill as English is now seen as an essential skill to secure a job with top firms that started to enter the country.

Teacher Mohammed stated:

technology is amazing and after what we have been through in the last four years it is important to know and to catch up on what we have missed. I am aware teachers in other areas of the country have been trying to embed ICT even if on a low level, but for us we have done nothing in this respect and we really need to address this issue as soon as possible.

Teacher Noor stated:

I believe the training that we were promised on digital skills and the teaching of English language would make a difference in enabling us to embed technology in our teaching practice effectively. We have had no training in these important fields, and it is time now we get the grip on such skills that will inform our future.

All participants have articulated they are currently not implementing any aspect of The Empirical Teacher Leader Model, but are ready to and have an appetite to do so.

Conclusions and SMART Knowledge to Action Strategies

The evidence reveals that participants are currently not implementing any aspect of 'The Iraqi Empirical Model of Teacher Leadership' to propel Professional Learning Networks to optimise learning in a digitised age with languages of and for open access and modernisation. The evidence reveals they are ready to implement this model and have an appetite to do so. By implementing the Iraqi Empirical Model of Teacher Leaders', these Iraqi professional educators, at different levels of the education system, can have a clear road map for school improvement. By implementing the Iraqi Empirical Model of Teacher Leaders they can mobilise their education systems to empower young people to become the change they articulate in their own narrative capital. Thus the Iraqi Empirical Model of Teacher Leadership can empower teacher leaders to build professional learning networks that Empowers Young Societal Innovators for Equity and Renewal. These young people can create their own solutions to the challenges they face by applying the competence of Assessment for Personal and Social Learning with ABCDE. They can amplify the impact of their knowledge to action strategies by developing new partnerships in their communities, located in their emerging quadruple helix, The citizens of Mosul can work themselves out of poverty and grow a middle class that provides pathways to middle class benefits. By propelling entrepreneurial economies they can work with new employers entering Mosul with a logical, empirical and ethical contractualist approach that maximises reason. These new partnerships are protected from being exploitative because they are underpinned by citizen' contractualist approach. The contractualist approach assures the people of Mosul use their digital skills, and languages of and for open access and modernisation to pay taxes that are invested in building social infrastructure including access to clean water supply and sewage systems, housing, and services such as the health service. With these foundations safely in place, citizens can make informed choices about the resources they need to support them starting a family and then investing in a pension as part of a sustainable future proofing healthy ageing strategy. The Iraqi Empirical Model of Teacher Leaders can then consolidate the modernisation and build on it to apply ABCDE with Assessment for Personal and Social Learning to meet the Sustainable Development Goals (United Nations, 2016).

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Mayamin Altae Qatar University, Qatar. Email: maltae@qu.edu.qa

Alison Taysum Taysum and Associates. Email: alisontaysum@yahoo.com