

# Reverse Mentoring – Digital Technologies for Education

Reversing to move forward with mentoring

## Introduction

Reverse mentoring is a specific form of classical mentoring where the role of mentor and mentee can be flipped. Traditionally, mentoring can be viewed as somewhat hierarchical and one-dimensional, with the mentor's role as a catalyst to a mentee's professional success. Four main domains of mentoring have been identified: academic support, role modelling, psychological support, and support for career progression (Crisp & Cruz, 2009; Eby et al., 2010)

Mentors have the opportunity to develop leadership skills and organisational knowledge, while mentees increase content knowledge, technical skills, and cultural insights (Murphy, 2010, using initial work by Kram, 1988), with talent management, innovation, and social equity being developed with the organisation.

In reverse mentoring this traditionally dyadic relationship of subordination changes to a more mutual sharing of ideas and specifically technological expertise. In schools, typically, a teacher with a digital specialisation (they may be less experienced, in pre-service, or newly qualified) takes on the role of mentor to a more experienced teacher, who becomes the mentee. It formalises the informal reciprocity that has occurred for years, whereby older professionals are mentored by their younger counterparts.

## Development of the model

This model gained attention from American enterprise, its inception accredited to Jack Welch of General Electric. In the late 1990s, he acknowledged his own lack of technical expertise and the need for reform to adapt to



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emerging innovations. To facilitate change management, he ‘tipped the organization upside down’. Initially conceived for transforming technical skills, reverse mentoring has evolved to a more mutual mentoring practice in different sectors.

The Digital Learning Framework represented a key support under the Digital Strategy for Schools 2015–2020. It is adapted from the UNESCO ICT Competency Framework for Teachers (UNESCO, 2011), giving schools greater clarity on embedding digital technologies. Prior to remote emergency learning, teacher practices had undergone little change since the launch of the initial policy for schools (Cosgrove et al., 2013). Increased rates of digital adoption in the sector have highlighted the need for sustainable change and continuous reform: ‘Schools have been the subject of endless improvement agendas from the incremental and emergent to the radical and revolutionary’ (NCCA, 2021).

In the advent of Industry 4.0 and Education 4.0, there will be a need for ongoing synergy, agility, and relationship-building in education, which reverse mentoring may encourage. This transformation focuses on smart technology, artificial intelligence, and robotics, all of which now affect our everyday lives.

Based on the framework developed in Schools of the Future (World Economic Forum, 2020), the Education 4.0 initiative aims to better prepare the next generation of talent by transforming primary and secondary education. It will drive impact through four interconnected interventions:

1. implementing new measurement mechanisms for Education 4.0 skills
2. mainstreaming technology-enhanced Education 4.0 learning experiences
3. empowering the Education 4.0 workforce
4. setting Education 4.0 country-level standards and priorities

A recent report highlights that to maximise the potential of new technologies, ‘organizations must put humans in the loop – reconstructing work, retraining people, and rearranging the organization’ (Deloitte, 2018).

Many definitions of mentoring have been developed, reflecting the many contexts where it is used. A standard definition is elusive, which poses a challenge to establishing the structure of reverse mentoring. But common elements can be found when analysing mentoring practice (Haggard et al., 2011):

1. reciprocity of the social relation between mentor and mentee
2. developmental benefits related to the mentee’s work or career, and benefits for mentors profiting by the learning partnership
3. regular/consistent interaction between mentor and mentee.

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## In education

Reverse mentoring may empower both emerging and established leaders. Teachers can gain important leadership skills if they can navigate these situations well (Leavitt, 2011). Reverse mentoring aligns with the theory that personal development relates to leadership development (Parker et al., 2008).

School culture may also be enhanced and plays a large role in whether the adoption of reverse mentoring is successful. Collaboration and cross-pollination of ideas encourage educational organisations to envision new possibilities. It may be instrumental in school re-culturing (Hargreaves & Fullan, 2000). The relationship can empower mentees to create change from within and move away from the 'conservative approach of socialisation that tries to maintain the prevailing situation and compel the newcomer into those circumstances' (Tynjälä et al., 2019).

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Tensions can also arise from reverse mentoring, due to 'personal issues, pedagogical issues and professional issues' (Hudson & Hudson, 2017). Before implementing such a programme, Chen (2013) writes, 'organizations should take great effort to prepare employees psychologically for the experience of learning' from a colleague who may be new to an educational institute.

Growing awareness of mindsets and the emergence of social-emotional learning are areas of further consideration for educators (Markowitz & Bouffard, 2020). According to CASEL (2020), 'Social and emotional learning (SEL) is the process through which children and adults understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.' It is an important part of a well-rounded education. The reciprocal nature of reverse mentoring may further cultivate an environment of mutual learning and empathy-building.

## Relationships

Professional relationships in an educational organisation are key. There is a wealth of research on the importance of connectedness in schools and on the qualities of in-school relationships that promote effective education. In reverse mentoring, trust and respect were identified as relational obligations of the relationship (Haggard & Turban, 2012). This entwines with human-resource management, where work relations and change management have come to the fore in the educational landscape; topics such as employee wellbeing, workplace equity, employee participation, joint decision-making, and social legitimacy are increasingly important (Thorntwaite & Balnave, 2016).

Reverse mentoring has benefits and challenges when there is focused consensus on an area such as digital technologies. If it is implemented as part of a regular mentoring programme, rather than by itself, this may mitigate some of these challenges and enable a more balanced approach to the professional relationship, whereby both parties share knowledge and contribute.

Kram (1988) identified four stages of mentoring relationships: initiation, cultivation, separation, and redefinition. Essentially, the development of mentoring relationships is based on the needs of both parties. Initial training for all participants is important: 'just one-third of mentor-mentee relationships are successful without training' (Brad Johnson et al., 2020).

## Challenges and prospects

Unfamiliarity with the role or structure of the relationship can prove challenging, while job security and the need for a safe environment also need consideration. A mentor in a reverse mentoring programme may experience vulnerability, particularly when mentors are critical (Ehrich et al., 2004). Acceptance is a relational obligation for mentors (Haggard & Turban, 2012).

Potential challenges to formal implementation of mentoring that encompasses reverse mentoring include the following (Jones, 2012):

- » Mentoring needs support at a high organisational level.
- » The mentoring programme needs to fit into the running of the organisation.
- » Flexibility is required in time management and availability.
- » The mentoring programme needs to be promoted.
- » Mentors and mentees need to be strategically matched.

Current research has focused on traditionally aligned mentoring programmes. Peer coaching is also referenced, as a more balanced and less hierarchical approach. Few studies examine reverse mentoring's existence in education; further empirical studies and theoretical approaches would need to be conducted and developed to bring its significant potential for education into practice.

Reverse mentoring, implemented as part of a structured mentoring programme, may offer both parties the opportunity to grow professionally by exchanging teaching experiences and pedagogical tools in an atmosphere of trust. Outside of digital technologies, it may offer another strategy to ensure exposure to and awareness of new methodologies. It may help identify emerging areas of need, ultimately improving collegial collaboration and

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building trust and commitment to creating a digitally receptive educational environment and dynamic learning community.

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Transition Year students at Drimagh Castle Secondary School took part in the climate education programme 'Rewrite'. One of Rewrite's core philosophies is to infuse optimism and positivity into the understanding of climate change. Sonya Murray, Rewrite Schools Coordinator said: "We can't change what's been done in the past, but we can re-imagine the future."