There are few skills more important to acquire in today's world than literacy. Literacy is a gateway to academic achievement and a significant influence on outcomes as diverse as earning potential and health and wellbeing. High levels of literacy across society are vital to happy, healthy and fulfilling lives¹. However, despite the undeniable importance of literacy, literacy levels have been flatlining or in decline in many countries across the world, especially in a number of western nations.

This research summary outlines the benefits of literacy for both education and broader life outcomes. Literacy here is conceptualised as the ability to read and write proficiently. Using this definition does not negate the significant role that other modes of literacy, including oracy and listening skills, have on individuals' life outcomes. It also recognises that each of these modes of literacy is interrelated – for example, early oral language skills are known to strongly predict later reading comprehension². However, given that the vast majority of research studies that inquire into the importance of literacy define it in terms of reading and writing, it is practical for this brief summary to take reading and writing as its focus.

Literacy and educational success

Literacy is essential for educational success and underpins a student's ability to access the breadth of the curriculum and achieve highly across it. Children who lack adequate levels of literacy risk experiencing a narrowed curriculum, ongoing difficulties with self-expression and limited future pathways.

From the start of formal schooling, students who struggle with literacy will seriously struggle both to access written material used in classrooms and to express themselves in tasks that involve writing. Subject areas like English and the social sciences are extremely dependent on student literacy, as the vast majority of learning tasks within these areas require substantial amounts of reading and writing, even in the early years of schooling³. If students have low reading levels, they will be unable to properly process the complex texts required to succeed in these subject areas. For instance, they will find it difficult to make inferences and to summarise information they read, which will significantly limit their ability to build the knowledge and understanding they need for future success⁴. Similarly, students with insufficient writing skills will struggle to express themselves with the level of competence and sophistication required to succeed in these subjects. The converse is also true, and research has consistently shown that so-called 'writing-to-learn' interventions, where writing is embedded into instruction as a way of deepening student understanding of content, lead to improved academic achievement in these subjects, especially if such interventions are sustained throughout a student's years at school⁵.

Literacy is just as important for students to access the curriculum and achieve academic success in subjects not traditionally associated with literacy. Research has shown that literacy is crucial for mathematics and science achievement, especially as these subjects move to focus more on 'real-world' problem-solving tasks which require students to engage with complex texts⁶. We also know that literacy-based interventions focused on improving reading are an important way to improve student outcomes in these subjects⁷. While less is understood about the relationship between writing ability and achievement in subjects like science and mathematics, some research has shown that students' ability to express themselves clearly and accurately in writing is central to doing well in these subjects⁸. It is also the



case that, as with reading-based interventions, interventions in science and mathematics classrooms that support students to become better writers, such as the 'writing-to-learn' style interventions above, support their achievement in these subjects⁹.

Finally, research indicates that there is a significant relationship between literacy and what is typically termed 'fluid intelligence', that is, the ability to reason efficiently and critically, particularly in the context of solving novel problems¹⁰. It is difficult to define the direction of this relationship with a great degree of precision, but it is likely bidirectional, which means that fluid intelligence supports literacy development and also that gains in literacy may support gains in fluid intelligence. Therefore, in addition to providing students with opportunities to learn and supporting success across the curriculum, literacy likely also supports the development of general cognitive skill¹¹. However, this is still an emerging area of scholarly inquiry.

Taken together, the above evidence makes the importance of literacy for educational success clear. It is essential to ensure that students are highly literate if we want them to be able to access the full breadth of the curriculum and reach their full potential within the education system.

Literacy and broader life outcomes

Beyond formal education, literacy is an important factor when it comes to a range of life outcomes, from income levels to improved happiness and health.

Literacy and income

A range of studies have shown that improved literacy levels directly correlate to improved income levels for individuals. For instance, the OECD's Programme for the International Assessment of Adult Competencies (PIAAC) study found that moving from the lowest levels of literacy to the highest levels of literacy (as measured by their scale-based system) resulted in an 8-10% increase in hourly earnings for those with an upper secondary education, and a 15-18% increase for those with a tertiary level education. This was the case even when controlling for a range of factors such as age, gender, and parental education levels¹². A similar study from the United Kingdom found that, even when controlling for factors as diverse as an individual's socio-economic status, the school they attended, parental involvement in their education and so on, those with what they called 'functional literacy' (a reading age of 11 or above) were able to earn on average 16% more than those with lower levels of literacy¹³. The data for New Zealand mirrors these international trends, with higher literacy levels directly correlating with higher earning potential¹⁴.

Literacy and health

The links between literacy and health outcomes are many and varied. A number of studies show strong correlations between literacy and general health outcomes, and demonstrate that more literate individuals enjoy better health and live longer¹⁵. Even when controlling for other potential factors which could explain health outcomes like age, gender, socio-economic status, income, ethnicity and so on, lower literacy has been consistently associated with outcomes as diverse as more hospitalisations, lower vaccine uptake, lower participation in screening programmes (such as those for certain forms of cancer) and increased recourse to emergency care¹⁶. In particular, a number of studies looking at the relationship between literacy and health have focused on individuals' ability to engage with the complex texts necessary to navigate health systems, self-administer prescription drugs correctly, and follow public health guidelines and general advice. Put simply, looking after your health often requires reading and comprehending a significant amount of complex information, and studies have shown that patients who struggle with understanding this information – such as the instructions on prescriptions or information forms provided by health services – will suffer poorer health outcomes as a result¹⁷. To summarise, a more literate population is also a significantly healthier population with a longer life expectancy.



Literacy and crime

As with income and health, a range of factors in a person's life course clearly influence whether or not they end up within the criminal justice system. However, research has shown that literacy levels remain a predictor of criminal activity, even when controlling for other key factors typically associated with an individual's likelihood of committing a crime¹⁸. The UK-based National Literacy Trust surmises that this is likely to be because issues with literacy may compound other already extant risk-factors, further limiting a person's life chances in ways which can ultimately, if indirectly, lead to criminal activity¹⁹. While it is important to be careful in claiming any direct causal link between literacy levels and rates of offending, literacy may be considered as one of a broad range of factors involved in understanding why someone may end up committing an offence.

Literacy, identity, and wellbeing

In addition to mediating some of the life outcomes explored above, literacy is also an important bedrock for identity, something which can have a number of positive flow-on effects for individuals and their communities. This is particularly the case where individuals and communities are able to gain or regain literacy in their heritage language(s). In Aotearoa New Zealand, Māori who have developed literacy in te reo Māori (the Māori language), including both oral literacy and skills in reading and writing, have been shown to have stronger cultural identities and greater overall wellbeing²⁰. Strengthened literacy in heritage languages also means that individuals find it easier to engage in particular cultural spaces where these heritage languages are predominant. This improved sense of cultural identity has positive effects on mental health in particular²¹. Beyond cultural identity, literacy also supports the development of self-understanding, the understanding of others and self-expression through reading and writing, all of which can positively affect mental health more broadly²².

Endnotes

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