Seeing is Believing?

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'Internal Migration in England & Wales, year ending June 2011' (Office for National Statistics), 'Your Olympic Athlete Body Match' (BBC) and 'Gapminder World' are some examples of data visualisations that not only present information and tell a story but also draw people in to want to find out more. However, can we believe every picture and representation we see and get trustworthy information from them? There are many examples of data visualisation that distort and misrepresent the data they are presenting. These can be unintentional but sometimes may be deliberate to make a point not evidenced by the data. In this paper we look at examples of poor and misleading graphs and charts. Some extremely bad examples are taken from the real world of business and finance while others are generated from real data captured from children through the *CensusAtSchool* International Project. We will show how these poor examples can be used to create engaging learning resources for school-aged learners to demonstrate and encourage good practice when presenting data.

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