# Text A: From the discussion chapter of a PhD thesis (Plant science)

Vucica, Y. (2002). Insertional mutants of *Chlamydomonas* affecting the central pair apparatus of the flagellum. PhD thesis. University of Tasmania.

A potentially important result was observed in *tcp*1. A 70 kDa SUK4 protein was absent in *tcp*1 flagellar and axonemal fractions while present in both wild type and *pf*18 flagellar and axonemal factions. It is possible that the gene affected in *tcp*1 either encodes the 70kDa protein or encodes a protein that in some way interacts with the 70 kDa protein. It is believed that kinesins and kinesin-like proteins are the force behind the rotation of the central pair apparatus (Johnson and Rosenbaum, 1992) and that if this force is not evenly distributed along the length of the cilium the central pair will be twisted (Omoto and Kung, 1979). Thus, potentially the absence of the 70 kDa SUK4 kinesin and the twist of the central pair microtubules in *tcp*1 may be related.

- 1) What type of writing is this descriptive, analytical, persuasive or critical?
- 2) Circle the words which are a clue to this.
- 3) Underline any claims made by the author.

# Text B: From a PhD research proposal (Occupational therapy)

By a previous research student who has granted permission for use in teaching materials.

The few studies that have examined physical activity (PA) and parenthood have focused on mothers with pre-school children. Very little literature focuses on fathers, or mothers with older children. Epidemiological studies investigating the effects on parents' PA levels to the ages and numbers of children have produced mixed findings (Bellows-Riecken & Rhodes, 2008; Brown & Trost, 2003; Nomaguchi & Bianchi, 2004). Wide variations in methodology, particularly in the measurement of PA, (such as a variety of self report surveys, pedometer and/or accelerometer measures), and variation in the definition of PA (for example, Phongsava, Merom et al (2004) did not consider household, childcare and occupational PA in their study) are likely to have contributed to the lack of consensus in these studies.

- 1) What type of writing is this descriptive, analytical, persuasive or critical?
- 2) Circle the words which are a clue to this.

#### Text C: From a PhD research proposal (Business)

By a previous research student who has granted permission for use in teaching materials.

The model of Gnyawali & Fogel (1994) presents a suitable framework to describe the environment of small business development. The model has the following factors:

- Government policies and procedures
- Socio-economic conditions
- Entrepreneurial and business skills
- Financial assistance
- Non-financial assistance
- 1) Descriptive, analytical, persuasive, or critical?
- **2)** Why?

## Text D: From a literature review article (Policy studies)

Martin, B.R. (2012). The evolution of science policy and innovation studies. Research Policy 41, pp. 1219-1239.

A few authors have attempted a more quantitative approach to identifying important contributions. For example, Cottrill et al. (1989) carried out a co-citation analysis of the literature on 'innovation diffusion' and on 'technology transfer', showing there was little interaction between these two research streams. However, their focus was much narrower than the study reported here. A few years later, Granstrand (1994) produced an overview of the economics of technology, but he focused on economic contributions and (primarily) on books that had made important contributions (as opposed to journal articles). Moreover, this analysis is now over 15 years old, so it is worth looking at what has since changed.

## Text E: From a PhD research proposal (Business)

By a previous research student who has granted permission for use in teaching materials.

While there has been an historic reliance on positivist, variable-centred approaches in small business research, Blackburn & Kovalainen (2009) urge more attention be given to explanatory mechanisms underlying social and economic phenomena. They suggest that while survey methods, analysis and statistical techniques have improved the descriptions of social and economic conditions, the faith in statistical analysis as the main tool for generating theories and in seeing relationships has been too high. For example, much of the work undertaken, particularly in the field of small business appear to have been conducted in a functionalist manner. Studies conducted by Bennett & Robson (2003) and Webster et al. (2005) use a quantitative method and report their findings in exclusively numeric terms. This is of particular importance to the current research, which will carry a critical theory paradigm and use a predominantly qualitative approach, supported by quantitative elements.

# Text F: From a PhD research proposal (Philosophy)

By a previous research student who has granted permission for use in teaching materials.

The common argument against anti-aging researchers such as Dr Aubrey de Grey, who believe that we will soon reverse aging and substantially extend human life spans via successful anti-aging strategies, has been essentially that evolution is far cleverer than we are, and that we cannot think to do what evolution cannot or did not need to do, that is, eradicate aging and give ourselves a much longer lifespan. In response, however, those like Tom Kirkwood and Michael Rose – who believe that the evolutionary theory does in fact leave open the possibility of further prolongation for the human life span – have pointed out that what natural selection actually does is select for the optimum rate of aging for each species given its evolutionary niche, and thus *non-aging* beyond this rate is always thought to be "suboptimal", this is below or less than the optimum level that it could be.<sup>8</sup> Basically the evolutionarily-determined optimum life span of a particular population does not necessarily have to be the maximum life span, and that, in fact, evolutionary theory strongly suggests that "organisms are programmed for survival not death" and that human longevity may 'evolve' in the future, along with our slowly changing evolutionary niche, to give our species greater longevity.<sup>9</sup>

## Text G: Headings of the Literature Review chapter from a completed PhD thesis

#### 2. Literature Review

Introduction

Type 1 diabetes

Type 2 diabetes

The complications of diabetes

Microvascular complications

Macrovascular complications

The importance of treating blood pressure and lipids in diabetes

Treatment guidelines for diabetes

Do guidelines work?

The evolving diabetes epidemic

The personal impact of diabetes

The economic impact of diabetes

Who should look after people with diabetes?

Diabetes care in Australia

Supporting diabetes care -The shared care approach

Conclusions

Overland, J. E. (2000). *Factors that affect the delivery of diabetes care*. Ph.D Thesis. University of Sydney.

- 1) What parts of this chapter do you predict will be critical?
- 2) Where do you predict the author's critical claims will be located in this chapter?
- 3) Where do you predict the **evidence/support** for the author's critical claims are located in this chapter?