Compare and contrast Riding and Rayner’s concept of cognitive style with Bigg’s concept of learning style.

Cognitive style is regarded as an individual’s preferred and habitual approach organising and representing information (Riding & Rayner, 1998). An individual’s cognitive style is a dimension which may influence their attitudes, values and interactions with others. Cognitive style does not appear to predict intelligence, as no relationship was found in correlational studies by Riding and Pearson (1994) or Riding and Agrell (1997). In contrast to this Biggs concept of learning style refers to the ways individuals prefer information to be presented to them. Though learning styles are considered to be a biological characteristic they can also be influenced by culture, maturity and personal experiences, and can therefore change over time unlike the cognitive style which tend to remain fairly consistent.

Riding and Rayner (1998) identified several traits of a cognitive style which could be accommodated within two fundamental dimensions; these being the wholist-analytical dimension which refers to whether a person tends to organise information into wholes or only parts. The second dimension is the verbal-imagery style which is whether an individual represents information in a verbal manner or through mental images. Riding and Rayner stated cognitive styles are involuntary as they have a physiological basis, so are the score relatively fixed. Witkin, Moore, Goodenough and Cox (1977) stated that in order for a dimension of cognitive style to be valid in must have bipolarity, decisivity, stability and qualitative differentially. The most commonly used tool which meets this criteria is the cognitive style analysis (CSA), developed by Riding (1991). This is a computerized tool which predicts a person’s cognitive style by measuring all four scales and creating a ratio for verbal-imager and wholist-analyst, though the validity of this measure has been questioned.

Sternberg and Grigorenko (1997) explained that “everyone possesses every style to some degree, and what differs across individuals is strength of preferences.”

As cognitive styles influence learning they have been taken into great consideration when teaching to ensure all pupils are provided with an education which will facilitate their learning best. One implication is that – as suggested by Riding and Sadler-Smith (1992) individuals regarded as wholes will require teachers to break down given information into parts as they tend to see the whole picture and not the structure. In contrast to it is useful for teachers to provide analytics with summaries in order to integrate parts into a whole picture. A further implementation is the use of textual information for verbalisers and diagrams and pictorial information for imagers.

In a study by Riding and Rayner (1998) it was found that cognitive style could be linked to achievement in American Indian and Alaska Native students. Their findings showed that imagers learning performance almost doubled when their learning materials included images and text, compared to just text alone. In contrast to this verbalisers performance did not improve when images were added to the learning materials. Riding and Sadler-Smith (1992) believe that when a mismatch between cognitive style and presentation of material arises learning performance reduces. However, in a later study by Kolb (1984) it was