

## **Wordle: A Method for Analysing MBA Student Induction Experience**

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# **WORDLE: A METHOD FOR ANALYSING MBA STUDENT INDUCTION EXPERIENCE**

## ABSTRACT

This paper examines the use of an innovative qualitative research tool, the Wordle, in the context of management education. Wordle is a free visual presentation software application that allows researchers to produce word clouds which provide an understanding of informant narrative. Wordles are visually attractive and fast to produce. They provide a preliminary research tool that can stimulate further research or focus. The paper presents a case study set in the context of a management education programme, the MBA, where it was found that the use of Wordles quickly and effectively highlighted both positive and negative areas in the student experience at the induction stage of their course. This allowed the programme team to explore elements with their cohort in order to build on areas of strength or address areas that were identified as issues.

## Keywords

MBA; Induction; Word clouds; Wordle; Student feedback; Qualitative analysis

## INTRODUCTION

In management education formal and informal participant feedback is essential for a delivery team to understand how participants feel about their experience on a course of study and the expectations that they come to the course with. This paper uses a case study approach to examine the use of a word cloud application, Wordle, as a method of developing an enhanced understanding of MBA student experience during a programme's induction stage. A word cloud is a particular form of visualizing text in which the more frequently a word appears in the data being analysed the more prominent it will appear in the visualisation. Wordle, launched in June 2009 (Viégas, Wattenberg & Feinberg, 2009) is a word cloud application that has gained in popularity since its inception. This paper examines its use as an initial supplementary research tool across a range of research projects. It is not suggested that Wordle, or any other word cloud software, at this time, can replace more detailed and, potentially more rigorous analytical qualitative or quantitative techniques in research. Rather, it is suggested that Wordle offers an initial data analysis tool, relatively easily applied, pointing researchers and programme managers to areas of potential interest for further analysis or research. Meaningful, timely and efficient feedback mechanisms are particularly important considerations in meeting the high expectations in management education.

The paper firstly sets the context in which the study is located. Pertinent literature is then examined around the method employed. The study's findings are presented and then discussed in relation to the extant literature.

## THE CONTEXT

MBA programmes are the cornerstone of many business schools' postgraduate delivery with an exponential increase in both the numbers of programmes and students taking MBAs globally (Bruce, 2010). The MBA has been the main means that business schools have attempted to bridge the relevance gap between academia and practice (Van de Ven, 2007). Various ways of categorising MBA programmes exist, but generically MBAs are differentiated by the mode of delivery – full-time, part-time (executive) and, more latterly, on-line (distance-learning). As the MBA market has matured a typical fragmentation of the product has resulted and we have witnessed the development of so-called named-route MBAs (Gupta, Saunders & Smith, 2007; Naudé, Henneberg & Jiang, 2009), for example, Aberdeen's MBA Oil and Gas Management (Robert Gordon University, 2010), or Manchester's MBA for Construction Executives (University of Manchester, 2010). This paper focuses on the student experience and learning on an executive MBA programme within the UK. Typically, executive MBAs are delivered to part-time employed students over a two to three year period. Normally, but not always, the age profile of the students on an executive programme will be older than a full-time MBA course and the students tend to be derived from the locality. It should be expected, although unfortunately it is not always the case, that MBA students should have a significant number of years senior management experience.

Induction classes at the start of any programme serve a number of purposes. They impart information about the programme of study. They also provide students with essential knowledge and skills required on the course, for example, critical appraisal and referencing skills. Induction sessions can embed students on a programme through familiarity and socialisation. This is an important consideration as

socialisation will improve their learning and experience and result in increased persistence (retention) of students (Tinto, 1988; Tinto, 2006). In an intensive management education programme, such as the MBA, an effective induction at the outset of learning is essential to embed managers in the context of the learning environment with which they will have to engage during the course. This study, although primarily focused on the application of Wordle, also reports the feedback from executive MBA students on their experience of induction sessions. It is argued in this paper that the Wordle provides an innovative approach to student feedback through its immediacy and presentation form that engages both staff and students. It is, however, recognised that Wordles provide an initial indication of student responses to an element of their course and it should be used in conjunction with other tools and mechanisms to gauge deeper participant perceptions.

The executive MBA that provides the focus of this study is a management education programme that is grounded in practice. The delivery team is cognisant of criticisms of MBAs, particularly the claim that MBA programmes are too academic and do not contribute to either individual or organisational improvement in performance (Elliott, Goodwin, & Goodwin, 1994; Pfeffer & Fong, 2002; Mintzberg, 2004; Bennis & O'Toole, 2005; Zhao, Truell, Alexander & Hill, 2006; Bruce, 2010). Mintzberg (2004) states that, 'MBA programs are specialized training in the functions of business, not general education in the practice of managing' (p. 5). Rubin and Dierdorff (2009) support this criticism, stating, '... MBA programs may increasingly find themselves at a relevancy crossroads in designing curricula' (p.222). The induction programme, as well as the entire MBA course examined, has been structured with these criticisms in mind. The programme is designed to immediately impact upon practice (See

Appendix A: Induction Programme Schedule). In light of this focus, having a variety of mechanisms for garnering student feedback on the impact of elements of a programme of study is important.

## WORDLE

The analytical tool, Wordle, used in this research is one of a number of programs available for generating word clouds, including: TagCrowd (Steinbock, 2008; Sinclair & Cardew-Hall, 2008); MakeCloud (2008); ToCloud (2007). Word clouds enable an understanding of the general composition of frequently used words within a specific context. They allow researchers to overview the themes in a text to analyse individual or group narrative and thus can be used to illustrate the main themes emerging from the data. It is in the latter mode that Wordle is used in this research. McNaught and Lam (2010) believe that Wordle ‘... demonstrates a fast and visually rich way to enable researchers to have some basic understanding of the data at hand’ (p.630). A number of other software packages undertake analysis of qualitative data, including NVivo and Atlas/ti, however, it is the visual impact and ease of use that make Wordle attractive for the type of research being undertaken. The visual presentation of data and the immediacy of this method of feedback perhaps allows for new and creative perspectives on established issues.

The Wordle application was selected for use in this research due to its versatility. The speed of use and visually appealing nature raises it above a number of rivals (Ramsden & Bate, 2008; McNaught & Lam, 2010). Wordles are closely related to tag clouds, encoding word frequency information via font size. It is, however, argued they offer a visually more attractive and flexible format (Viégas, et al., 2009).

Ramsden and Bate describe Wordle as, ' ... more personal and visual than the others ... ' (p.6). The software is free and easily accessible, which again, makes it an innovative and attractive research tool. The Wordle application maximizes the space utilization on a computer screen by sizing the words by their relative frequencies. A user-friendly web-based interface allows changing the font, colour, and direction of words in a word cloud. Text considered as grammatical or non frequent does not appear in the visualisation (Clement, Plaisant & Vuilleminot, 2008). Viégas et al. (2009) propose a number of additional positive aspects when using Wordle, directly applicable to undertaking academic research. These include Wordle's ability to encourage creativity and learning; to enhance a participatory culture, where individuals, be they respondents or researchers, have ownership of the Wordle. They also offer choice to individuals in the format adopted and provide artefact portability, i.e. respondents and researchers can produce and transfer visuals very easily. Thus, word clouds aid in the gathering of data from large groups of respondents (Ramsden & Bate, 2008).

There is a limited amount of literature about the application of word clouds and specifically Wordle in qualitative research, yet there are some examples of word clouds being used analytically. Clement, et al. (2009) used the software to produce word clouds in literary studies comparing and contrasting the styles of writing. Research on the use of word clouds has also been conducted to study public speeches. Dann (2008) used TagCrowd to analyze the 2008 Federal Budget speech of Australia remarking that the word cloud served well as a preliminary analysis. The representation allowed the researcher to see '... the level of self reference to the incumbent government and the presence of relationship marketing

keywords' (p. 14). Ramsden and Bate (2008) identify a utility for word clouds in education as they can provide very quick visual representations from survey responses that can be used in classes as points for discussion. McNaught and Lam (2010) take the application of word clouds in educational research further. They believe that Wordle is particularly useful for studies involving qualitative/thematic analyses of written or transcribed spoken text. Specifically, they examine Wordle's application as a tool for preliminary analysis enabling researchers to quickly highlight main differences and possible points of interest. This can form the basis of more in-depth analysis of the data. The use of Wordle as a validation tool to further confirm and interpret findings is examined. Viégas, et al. (2009) come to the conclusion that, in a broad sense, Wordle is an effective analytical tool, suitable for research.

Limitations in the use of word clouds do exist (McNaught & Lam, 2010). Firstly, the data or text inputted should be the original respondent's speech. If researcher's notes, minutes or summaries are used, this may invalidate as the frequencies of the words used will be changed. Secondly, the words presented in word clouds are out of context. There is not a system to track-back text to specific text. It is extremely difficult, if not impossible, for researchers to interpret the opinions of terms from a word cloud. As McNaught and Lam state, 'This mechanical manipulation of text is fast but at the same time it can be misleading because it neglects the semantics of the words and also the phrases and even sentences the words are composed of ...' (p.641). Building upon this critique, Ramsden and Bate (2008) highlight a number of factors that should be taken into consideration when using word clouds. Firstly, the data needs to be presented in a meaningful way; the responses need to be readable. Furthermore, responses need to be clearly attributable to specific questions.

Secondly, researchers need to understand how the word cloud software operates, particularly in relation to punctuation and spelling. Apostrophes and hyphens are interpreted by the software as linking words. Common words are ignored by the software. Thirdly, there are, what Ramsden and Bate describe as, generic issues to consider. There is an assumption that frequency determines importance. This is evidently not always the case and the researcher has to be aware of the context of the research. This point is important and is related to the problems inherent in the quantification of qualitative data (Todd, 1979; Bryman, 2006; 2007). Wordle might present a term or theme as important because of the frequency of its occurrence, when, it might be easily identifiable and articulated by respondents. It is questionable whether the use of Wordles can be considered as a mixed method approach to research (Bryman, 2007), however the method does utilise content analysis to produce the visual output. Lastly, Ramsden and Bate highlight the fact that word clouds often fail to group similar words or terms. They suggest that word clouds should be used with other methods so that results can be triangulated. It must be emphasised, and the research presented in this paper supports McNaught and Lam (2010) and Dann's (2008) assertion that Wordle is a useful tool for preliminary research. It has, however, to be supported with other more in-depth analytical tools.

Wordle has been described by its developer, Jonathan Feinberg, as a 'toy' (Feinberg, 2009). McNaught and Lam (2010) were attracted to this description of the application and analysed Wordle to ascertain its utility as, '... a scholarly toy of worth to the academic community ...' (p.630). Perhaps the writers of this paper are also intrigued as to the worth of the visually appealing toy from a method perspective. They are, however, as will be shown, also using the application in a

very practical way to analyse an amount of data for managerial and pedagogical purposes to improve management education.

## RESEARCH METHOD

The MBA researched is a product which has been fastidiously tailored to the requirements of both employers and employees and, as such, takes serious notice of its students' feedback. This feedback relates not only to the academic content of the course, teaching and learning processes and delivery, but also the way that the student feels about engaging with the educational experience. This MBA programme's induction has been crafted to ensure that all students are, as much as possible, enabled with necessary academic skills and knowledge such as: research techniques; writing skills; and critical appraisal.

As this research took a flexible approach to gain insight into phenomena that have not previously been explored, it is considered appropriate that the term 'exploratory' is used (Adams & Schvaneveldt, 1991; Saunders, Thornhill & Lewis, 2009). The researchers employed an exploratory, inductive approach to the research, in which qualitative data was sought by email. Adopting an interpretivist approach allowed the researchers to understand, rather than to take measurement of, occurrences within a certain context – in this case, the MBA induction programme. Consistent with the interpretivist perspective of the research approach (Carson, Gilmore, Gronhaug & Perry, 2001; Collis & Hussey, 2009) the use of a Wordle was employed as the means of framing the data for subsequent analysis. This study recognises the social construction inherent in an interpretivist approach and thus held no preconceived ideas of the data (Crotty, 1998). The impact of researcher bias should

always be taken into account in terms of the validity of a study's findings (Silverman, 2001). The use of Wordles, to an extent, reduces the tendency to bias, but still allows interpretation of the visualisation.

The study examined one specific cohort's induction experience. This induction programme is offered at the outset of the course and is delivered over an intensive weekend (Friday 1400 hours – Sunday 1700 hours) with follow-up sessions throughout the two year programme. All 21 students involved in the induction were invited to send feedback by email to the cohort leader after the weekend induction programme. The gender split within the cohort as a whole was 71% male, 29% female, and within the responding group, the gender split was 77% male and 23% female. A response rate of 62% was achieved.

Students were emailed for their responses and the following prompts for responses were used:

- What was enjoyed most?
- What was enjoyed least?
- What was most useful?
- Any other matters for comment?

Students were assured that both positive and negative feedback was welcome and respondents were invited to send feedback anonymously through student representatives. No pressure was put on students to respond.

The data was collated into one file, but separated according to the prompts for response. Data were first cut and pasted into Wordle in an unadulterated format, which generated a visual representation of the feedback (see Figure 1: Executive MBA Induction Wordle Unaltered)

Due to the lack of insight that the resulting Wordle provided in terms of context and meaning, the responses were then used to create separate word clouds for positive and negative responses. Those aspects that the students enjoyed most, considered to be most useful, and other matters for comment (universally positive) were used for the generation of a positive word cloud (See Figure 2: Executive MBA Induction Wordle Positives - Unaltered), and those enjoyed least for the negative word cloud (See Figure 3: Executive MBA Induction Wordle Negatives).

The researchers then edited the words and phrases used in order to produce some standard responses. As an example a student statement, 'I also enjoyed the way in which the cohort gelled as a unit considering we had only just met as a complete group' was interpreted as 'socialisation'. Tildes (~) were used to link words together, for example, problem~solving, social~innovation, which allows Wordle to recognise the phrase as an entity, rather than separate words. Capitalisation was also addressed, as Wordle recognises words with and without capitalisation as different text, even though the words themselves are the same. The resulting word clouds for positive (See Figure 4: Executive MBA Induction Wordle Positives – transformed into key phrases) and negative (See Figure 5: Executive MBA Induction Wordle Negatives – transformed into key phrases) aspects of feedback then gave a

much clearer visualisation of the prominence of responses and context of the student's experience.

### FINDINGS: INTERPRETATIONS OF FEEDBACK

The Findings are presented in terms of an un-altered feedback Wordle and then aggregated into positive and negative Wordles.

Un-altered feedback: (See Figure 1: Executive MBA Induction Wordle Unaltered)

[Insert Figure 1: Executive MBA Induction Wordle Unaltered, about here]

Interpretation of visual representation of un-altered feedback is that the students really enjoyed their induction experience, with the words 'really' and 'enjoyed' being quite prominent. This is corroborated by the original submissions, where students commented upon the induction programme being an enjoyable experience. 'Enjoyable' also features as a word in its own right, and if words had been standardised prior to the creation of the word cloud, then these two elements would have resulted in an even more prominent representation.

'Found', 'work', 'induction', 'discussion', 'know', 'thought', 'exercise' and 'people' also figured in a slightly less prominent way than 'really' and 'enjoyed', but without context, it is difficult to interpret how significant these words really are.

Interpretation of positive comments (See Figure 2: Executive MBA Induction Wordle Positives - Unaltered)

[Insert Figure 2: Executive MBA Induction Wordle Positives – Unaltered, about here]

Separating out the positive comments from other text resulted in a word cloud that had some commonalities with the prominence of certain words that were seen within Figure 1, but was not identical overall. Nevertheless, all second-level prominent words are similar to those generated by the un-altered feedback suggesting that misinterpretation is not taking place.

Interpretation of negative comments (See Figure 3: Executive MBA Induction Wordle Negatives – Unaltered)

[Insert Figure 3: Executive MBA Induction Wordle Negatives – Unaltered, about here]

Negative comments, however, provided a completely different perspective to that of the un-altered feedback word cloud. The most prominent words to appear within this word cloud were 'session', 'bit', 'long' and 'think'. The next most visually outstanding words are 'Blackboard', 'end', 'whole', 'time', 'really' and 'least'. This interpretation can be supported with the textual feedback initially gathered where, as an example, one student felt that, 'The session I found least enjoyable was on Blackboard....although important, I did struggle a bit with concentration here!' The different image indicates the positive experience of the students was the defining perception of the induction programme.

Interpretation of positive standardised phrases/words (See Figure 4: Executive MBA Induction Wordle Positives – transformed into key phrases)

[Insert Figure 4: Executive MBA Induction Wordle Positives – transformed into key phrases, about here]

Manual interpretation of the feedback relating to ‘most enjoyed’ and ‘most useful’ gave rise to a word cloud where the most prominent factors were ‘socialisation’ and ‘group discussion’. Second level importance illustrated the prominence of ‘problem solving’, ‘critical appraisal’, ‘confidence’, ‘ice breaker’, ‘academic writing’ and ‘quiz’.

Interpretation of negative standardised phrases/words (See Figure 5: Executive MBA Induction Wordle Negatives – transformed into key phrases)

[Insert Figure 5: Executive MBA Induction Wordle Negatives – transformed into key phrases, about here]

A similar, manual interpretation of feedback on the least enjoyed aspects of the induction programme produced a word cloud where ‘Blackboard’ and ‘quiz’ figured most prominently. There was, however, a paucity of negative feedback, and so all other words appear on the same level of prominence.

A tabular representation of the similarities and differences between the different word clouds is presented below.

	<b>Un-altered Feedback</b>	<b>Positive Comment</b>	<b>Negative Comment</b>	<b>Positive Standard Phrases</b>	<b>Negative Standard Phrases</b>
<b>1<sup>st</sup> level representation</b>	Enjoyed Really	Enjoyed Really	Bit Long Session Think	Group discussion Socialisation	Blackboard Quiz
<b>2<sup>nd</sup> level representation</b>	Discussion Exercise Found Induction Know People Thought Work	Discussion Exercise Found Induction Know People Thought Work	Blackboard End Least Really Time Whole	Problem solving Critical appraisal Confidence Ice breaker Academic writing Quiz	

### DISCUSSION – IN DEFENCE OF USING A TOY IN RESEARCH

Management education is never easy. The MBA student is typically the most demanding student taught within a business school. Roglio and Light (2009) state, ‘... the role of the instructor is not to teach students what they need to know, but to orient and guide their process of discovery’ (p.169). Such a process of discovery starts with the course induction. Feedback as to how students feel about their abilities (or lack of) and their experience appears crucial to retention and progression

and allows staff to evaluate the need for remedial workshops. The induction programme also aims to de-mystify processes, boost confidence and potentially enhance academic performance. This use of Wordles is a useful innovation in garnering feedback. This study found the visual presentation of findings and ease of use Wordle offers provides both academic and management researchers with an accessible preliminary research tool supporting Dann (2008) and McNaught and Lam (2010). As the use of visual communication in research and mainstream management education is still surprisingly rare this paper recognises the multimodal nature of this research, in that it uses both words and graphics to analyse and illustrate findings.

The use of Wordles can help develop a participatory culture as key stakeholders identify with the visual representations. Finished Wordles were used to illustrate to students that the overall experience of induction was positive, and interaction with students indicated that they appreciated the fact that such a device could be used as a tool for communicating the student experience to a wider audience, for example, by using a scanned image of the produced Wordle as the MBA Facebook Group profile picture and by placing a print-out of the resultant Wordle on the MBA notice-board. Students were also made aware of the value of such an illustrative tool for their own research projects.

If nothing else, Wordles with their attractive and portable format and flexibility can not only encourage creativity and learning amongst researchers and teaching staff but also amongst students as well, supporting Viégas, et al's. (2009) findings. This is important as researchers into management education and students can use Wordles

to gain different perspectives. It also provides managers (students) an alternative way of examining feedback, which may prove useful in their understanding of practices in the sectors from which they are drawn. In fact, to date, only some empirically-based published research based on Wordles has been applied (For example see: Šnuderl, 2008). There are a number of papers on the Web that discuss the use of Wordles, but these tend not to be peer reviewed.

The Wordles that resulted from the MBA induction feedback gave a very clear indication of which elements students found to be engaging, and what they felt was too onerous. As a result the session introducing students to Blackboard has been reduced to a very brief overview during induction, with follow-up sessions being run when students have had the opportunity to acclimatize to their study programmes. Additionally, for those students who may gather qualitative data for their Executive Management Project later on in the MBA programme, the use of Wordle gave these individuals a very practical introduction and early insight to a potential tool to visualise qualitative data.

One of the key benefits of the use of Wordles is that both staff and students can gain ownership of the group experiences - or not. Either outcome was found to be useful. Where students associated their perceptions with the visual representation this aided group cohesion. Equally, where students could not relate to the elements in the Wordle or identified their contribution as marginal, if managed properly by the facilitators, this could be a point of discussion to explore why.

It could be argued that Wordles add little to traditional forms of verbal or written feedback. The use of Wordles, however, in induction sessions engages both staff and students in management learning from the outset in a way that is far more immediate, transparent and therefore engaging than traditional feedback mechanisms. Engagement is a key aspect in any learning process and the Wordle provides a visually attractive and non-invasive approach to presenting the thoughts of participants. The use of Wordles assists staff in gauging the impact of their inputs and allowing them an immediate visual aid in garnering student perceptions. By presenting the Wordle analyses as part of the induction process it allows staff to explore feedback with students that perhaps written feedback would not allow as it would take some time to process and analyse the comments. Therefore, the ability to build on and strengthen activities is enhanced.

This research has confirmed some of the practical issues in the use of Wordle that previous research has identified. As Ramsden and Bate (2008) indicate, the data needs to be presented in a meaningful way and this was achieved by means of separating the comments into positive and negative feedback, rather than by chunking data and losing context. Great care was taken by the research team to code the data. However, this is a consideration in any qualitative study. As Ramsden and Bate identified, the researcher has to be sufficiently observant of the data to code (where appropriate) negative phrasing. For example: lack of confidence, rather than confidence per se). Wordle helps in coding as it allows manual coding the data. Wordle facilitates the use of a tilde (~) to join words together, so that phrases like social innovation will be visualised as a phrase rather than two individual words. Despite this facility, it was found that Wordle works better

where informants or data inputters use single word responses than narratives. This, however, can result in loss of meaning, particularly where the context of the Wordle is not very clearly articulated. Variation of capitalisation (For example: social innovation/ social Innovation) means effectively that multiple terms are inputted. Again, this needs to be addressed by data inputters. One practical issue with the use of the software is that Wordles cannot be downloaded as a picture straight into other documents so care is needed in the expectations that are set for contributors.

Ramsden and Bate (2008) highlight a key issue with Wordle, and word clouds in general, that frequency sometimes does not determine importance although the visual presentation leads the observer to that conclusion. As any experienced qualitative researcher will attest, it is often a single and contrary response by the person being interviewed that is most illuminating. This emphasises the need for triangulation to explore in-depth and from different perspectives factors that the Wordle has brought into the researcher's consciousness. However, the visual representation of terms used by respondents creates potential avenues for exploration in the analysis.

The researchers in this study used Wordle as an initial method to gain an overview of the issues arising from the induction classes. It has confirmed that Wordle is a practical way to analyse data quickly (McNaught & Lam, 2010). As Viégas, et al. (2009) state, 'Some educators used Wordles as an entry point into discussion ...' (p.1143). The authors of this paper found that it has performed this task with three discussions being promoted; a conversation between the delivery team, a narrative with the wider academic community and a discussion with the students themselves.

Though all of these discussions are important, the last, has proved most valuable to the researchers, who also are part of the MBA delivery and management team. The Wordle provoked a lively discussion with the students focusing on feelings about the course and their learning. Thus, a degree of iteration is promoted through the simple, and visual, mechanism of the Wordle that can further stimulate student reflection and learning. Wordles do not, perhaps, produce new knowledge, but their innovation in management learning is in terms of gaining and presenting feedback in a visually attractive and easy to generate way. It was found that this engages both staff and students in the learning process at the outset of the course. The Wordles produced can be used as an aide memoire for staff when preparing to deliver an induction or other classes. They also allow staff to respond, quickly to student perceptions. Used in conjunction with other formal and informal feedback mechanisms Wordles can be used to initiate further discussion and research into management requirements within a programme of study. In terms of the MBA programme that utilised Wordles in the induction programme, the course team have used the feedback as the basis of group and individual development sessions with the cohort. The team have also used the responses as the basis for amendments to the induction programme. This conversation has continued throughout the delivery of the programme to the cohort and has allowed the delivery team to re-assess their approach to induction and the elements within it. Thus, the educational experience for both staff and students has been enhanced.

The acceptance of word clouds and specifically Wordle as a legitimate analytical research tool is an issue that Viégas et al. (2009) seem acutely aware when they state, 'It behoves visualization builders to explore the possibility of judiciously

'bending the rules' of traditional design to allow for more expressive uses' (p.1143). This is a really interesting observation. As researchers and teachers increasingly have access to new media, technology and analytical tools, there is a necessity for academia and perhaps even managers to utilise these innovative techniques and to move away from the traditional approaches accepted by academic researchers. There is more than enough evidence and discussion about the failure of academia to engage with the practice of management (Starkey & Madan, 2001; Weick, 2001; Jarzabkowski, 2003; Baldrige, Floyd et al., 2004). Using approaches, like Wordles, may help address this lacuna.

The relevance gap that has been identified by practitioners, government and academics is a serious issue for the credibility of not just management development programmes such as the MBA, but also the university sector as a whole. The research team, as designers and developers of MBA programmes have been acutely aware of the criticisms. It is essential that staff use timely and immediate feedback mechanisms to respond to student (customer) requirements. Researchers also need devices to point them in the appropriate directions when carrying out in-depth research. The Wordle is an aide in achieving both these tasks and should be explored as a legitimate tool for both academic and management researchers and not just an academic toy.

## Appendix A: Induction Programme Schedule

### FRIDAY

- 1.0 Introduction
- 2.0 Student Expectations
- 3.0 The University and the MBA
- 4.0 Masterliness
- 5.0 Etiquette & University Regulations
- 6.0 Referencing & Plagiarism

### SATURDAY

- Business test
- 7.0 Student Information and Communication Technologies and Systems
- 8.0 Assessment
- 9.0 Research Methods & Skills
- Social activity

### SUNDAY

- 10. Problem Solving Techniques & Exercise

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