

Getting together in new ways: hybrid academic and professional texts in Humanities and Engineering

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Abstract

Over recent decades, several key social and economic changes have affected the teaching of writing in practice-based universities in Australia. This paper focuses on the impact of a 'new vocationalism' (Dovey 2006) on the type of assessment tasks designed in faculties, and on the type of written texts that students produce. These tasks aim to bring together academic and professional knowledges to address issues and problems that students might expect to face in the workplace. Working collaboratively and reflecting on learning are critical to these tasks. The written texts that students produce are intended for a dual academic/professional audience and are typically 'hybrid' in style. The paper discusses examples of writing tasks in humanities and engineering faculties that aim to address both the immediate needs of students who are learning to write within the academy and their long-term need to write for their professional careers.

Introduction

The teaching of writing in universities has, in recent decades, been influenced by notions of literacy as a contextualised social and cultural practice (for example, Barton & Hamilton 2000; Gee 1996; Street; 1984, 1993), and teachers of English for Academic Purposes (EAP) have worked to embed literacy teaching in specific academic disciplines, each with its own distinctive culture, language, and discursive practices (Reid & Parker 2002, p.24; Hyland 2002). Beyond the context of academic disciplines, key changes in the broader social and economic context of higher education have also had a significant effect on the types of written texts produced within the universities. For example, internationalisation, technology (computerisation), and economic rationalism have all been recognised as major 'change agents' influencing tertiary literacy (Absolom & Golebiowski 2002).

The focus of this paper is on the changes brought about by the 'new vocationalism', which has been identified by Dovey (2006) as having a major influence on the processes and productions of tertiary literacies. The 'new vocationalism' refers to a shift in the world of work, towards a workplace based on a knowledge economy influenced by global competition and global flows (Appadurai 1996), and characterised by rapid change. The type of knowledge that is valued in this context is 'knowledge *how*, rather than knowledge *about*' (Ryle 1962, cited in Bereiter &

Scardamalia 1993), knowledge that is transdisciplinary, heterogeneous, and contingently applied to a specific localised problem; rather than an older style of stable disciplinary knowledge that is 'homogenous, and hierarchical; and quality control[led] by expert peers' (Dovey 2006, p.390). The resulting impact on pedagogy, subject delivery, types of assessment tasks and methods of assessment presents challenges for teaching staff and students alike. The purpose of this paper is to investigate what the new vocationalism means for the practice-based university, its particular challenges, and the benefits students reap from a 'hybridised' instruction and assessment system. This will be illustrated through discussion of two subjects from humanities and engineering faculties.

Writing for the new vocationalism in practice-based universities

The orientation of practice-based universities is 'towards the knowledge resources appropriate to professional and workplace goals, rather than traditional disciplinary goals' (Dovey 2006 p. 391). They offer a range of workplace-based and practice-based courses which typically aim to 'merge professional reflective practice with theoretical knowledge' (Lea & Strierer 2000, p.9). Thus, learning in these contexts is not so much about mastering a pre-existing body of disciplinary knowledge and written disciplinary genres, as collaboratively building new knowledge in a process of shuttling between academic and professional (workplace) domains.

New tasks, audiences and purposes

Within the practice-based university, the new vocationalism is reflected in the tasks emerging in all faculties. These are tasks that reflect and 'graft together' academic and professional knowledge (Dovey 2006 p.394). The tasks and written texts produced are of a constantly evolving, hybrid character, bringing together features of professional, academic and reflective writing in various combinations, borrowing from both workplace genres, and from more traditional academic genres. These new tasks usually comprise a 'performance phase', simulating a professional task, and a 'documenting or writing up phase ... reporting and/or reflecting on the performance' (Dovey 2006, p.394).

The changes outlined above present several challenges for teaching staff and students. One challenge identified in such writing tasks relates to the 'dual audience', with texts produced in the academy straddling different conventions and purposes, and intended for both lecturer and (imagined) workplace reader. A second challenge relates to the hybridity and instability of written texts arising from practice-based tasks. Rather than requiring mastery of a set body of knowledge, the new workplace and academic tasks, from which the written texts emerge, require the ability –

- to manage social processes (for example, working collectively or in teams),
- to continually learn in new situations (learning how to learn),
- to engage in flexible approaches to problem-solving,
- to access 'self-regulatory knowledge' (Bereiter & Scardamalia 1993) through processes of experiential 'reflection-in-action' (Schön 1983).

The emerging hybrid texts, as a consequence, cannot be rendered accessible through the mastery of specific academic genres, discourse conventions, and grammatical structures. Rather, Dovey argues, learning to juggle the competing demands of academic and workplace texts requires an engagement with a set of 'new generic

skills' that reflect the abilities outlined above. First, with regard to managing social processes, students often participate in some form of 'face-to-face interactivity' (Dovey 2006, p.400) in order to accomplish at least part of the performance phase of assessment tasks. This necessitates students' engagement with a 'set of complex *interpersonal skills*' including 'role awareness, team building, negotiation strategies, and conflict resolution' (p.398). Second, with regard to learning how to learn, students need to engage in reflective practices, and produce *reflective writing* that critiques the student's own performance and 'translates concrete experience into appropriately abstract formulations about what has been learned and how that learning took place' (p.397).

Third, in place of learning about generic features of stable texts, new generic skills promote a metacognitive awareness of how text structures, linguistic strategies, registers and knowledge displays vary in relation to different (academic or workplace) audiences and purposes. This involvement of students in making *choices* about language use for particular purposes is key to promoting a critical language awareness and avoiding an assimilationist induction into workplace or academic discourses (cf. Harwood & Hadley 2004). A crucial role of the language and literacy lecturer is, therefore, to promote students' engagement with *how* knowledge is being produced in the context of the practice-based university.

In the following section, we describe writing processes and products in specific Humanities and Engineering subjects that illustrate some of the principles of the new vocationalism. In the first example, describing the writing tasks for a Public Relations subject in a communications degree, the language and literacy lecturer conducted writing workshops in parallel with the subject tutorials and lectures. In the second example, the language and literacy lecturer took the role of subject tutor in the semester long Engineering Communication subject.

Writing in Humanities

This section describes an assessment task in a core subject for the Public Communication stream of the Bachelor of Arts (Communications) degree course. The course overview provided in the handbook shows the interplay of academic/theoretical and practical/professional knowledges brought together in this program:

The critical and theoretical approach offered in this course develops ethical and responsible communication professionals. This course provides students with interdisciplinary knowledge of public communication processes and industries, and their social, economic and political contexts with specialised expertise in public relations and/or advertising (University of Technology, Sydney 2007)

The overview thus establishes two functions of academic knowledge:

- to produce ethical/responsible professional practice
- to place professional practice in a broader socio-economic-political context

These functions have precedence over practical, technical skills, which are introduced, along with the concepts of industry relevance, in the following paragraph:

Widely recognised as the leader in the field, this course develops *practical skills* and knowledge for contemporary public communication *practice*. Assessments and a professional industry placement ensure *industry relevance* and help students to develop portfolios for graduate employment. Lecturers are experienced public communication practitioners with strong industry connections (University of Technology, Sydney 2007. *Emphasis added*).

First and second year subjects introduce students to the various knowledge strands that run through the course: on the one hand, students engage with theoretical, social science paradigms, constructs and concepts, and with research methodologies, and apply these to various social, professional and industry or organisational contexts and problems; on the other hand, they engage with semiotic theories of meaning-making and interpretation, and apply these through specific genres of technical writing (speeches, media releases and so on). Students are also expected to understand public relations' historical evolution from a skills-based, technical orientation to a profession engaged in strategic management of communications.

Public Relations Strategies

The compulsory second year subject, Public Relations Strategies, aims to develop students' understanding of writing within the context of public relations as a form of 'strategic management' for specific organisations. In this subject, students apply both conceptual and practical knowledges to the development and production of 'innovative resources to address client problems or opportunities', and are expected to 'develop their written communication skills to a high professional level' (University of Technology, Sydney 2004). The assessment tasks for this subject draw on these conceptual and practical knowledge domains to produce a campaign strategy and a set of publicity products.

The first assignment requires students to produce a campaign strategy that addresses an issue or problem for a real organisation. In the 'performance phase' of the assignment, students first draw on workplace knowledges by selecting an organisation and interviewing a client from that organisation to determine the issue or problem that is to be addressed. They use a range of analytical tools to produce a 'situation analysis' of the organisation, the context in which the organisation is operating, and the various stakeholders and salient publics. Students then propose a range of qualitative and quantitative research methods to inform the development of broad goals and measurable objectives for a strategic publicity campaign, taking into account budgetary and time constraints. As part of the campaign strategy, they then propose a set of creative proposed 'tactics' (for example, events, media releases, radio announcements), targeted at specific publics, that address these campaign goals and objectives; and finally, determine a method for evaluating the campaign.

The 'writing up phase', which involves the production of a report, is broadly based on a professional campaign strategy genre. However, the report in fact draws not only on professional knowledge, but also on academic and creative knowledge domains. Together, these produce a typically hybrid (professional/academic) text (see Appendix A). The non-professional knowledge domains are seen in two main surface features of the written report: first, the analysis, proposed research methods and communication tactics must be supported by reference to theoretical literature; and second, the report also concludes with a personal reflection on the learning gained in the assessment

task. Clearly, neither in-text citations of theory, nor personal reflections, would be included in a professional/industry text.

In the performance phase of the second assignment, students produce a 'media kit' containing the specific products or tactics described in the campaign strategy report. In the writing up phase, they write a report that provides a theoretical rationale for each of the products. In developing these products, students should show evidence of creative thinking, and draw on 'technical' writing skills developed in earlier stages of the course, which focus on genres such as media releases, copywriting, and translating specialist texts into texts for a general public. In writing the rationale, they draw on theoretical or academic knowledge.

Leveraging professional and academic knowledges

The written texts emerging from this subject demonstrate the sorts of professional-academic merging, and hybrid textual practices, reported by Dovey (2006). In writing the report that forms the basis of the first assessment task, students have engaged with professional/industrial practice (through collaborative, face-to-face interactions with industry); and with professional/creative skills (in strategy design and technical writing). Students' engagement with these professional activities is, in turn, informed by their academic learning since the choices they make must be informed by theoretical literature drawn from a range of disciplines. An important function of students' engagement with academic knowledge is to mobilise understandings of ethical and socially responsible practice, applying these to strategic planning in professional practice. The academic knowledge made available throughout the course is itself drawn from a range of disciplines, and represents a spectrum from more abstract studies in semiotics, social constructivism, and psychology, to more concrete studies of government or industry contexts.

The students' second assignment, in which the strategic products are developed, and a second report is written, presents not so much a hybrid text but a group of related texts. The first series of texts, comprising the communications 'products', are designed for a professional or industry audience and purpose, and combine creative and technical skills. Underlying the design, however, is a rationale which is foregrounded in a final report designed for an academic purpose and audience. This academic report functions as an exegesis for the creative or professional products.

In terms of their purpose, these hybrid texts should be persuasive on both an academic and professional basis; the 'audience' for the texts, in this case the subject lecturer, also embodies both professional and academic knowledge domains: they are not only university lecturers, they are also 'experienced public communications practitioners with strong industry connections' (UTS: Humanities and Social Sciences).

Teaching writing for hybrid texts

Writing workshops conducted in parallel to the subject lectures are designed to focus on how the various knowledge domains come together in the written assessment tasks. Activities in face-to-face workshops conducted by the language and literacy lecturer involve students in analysis of where and how theory is used in the various interrelated stages of the report to inform and support creative and professional decisions and designs. Theory may be used, for example, in SWOT analyses of an organisation's strategic context, to inform decisions about proposed research methods (such as the use of focus groups) and proposed tactics (such as the writing of media

releases), and to model time and budget related schedules. Theory is also cited to indicate engagement with ethical perspectives and principles of social responsibility in all aspects of a campaign strategy. Students' attention is also directed to the ways in which the various sections of the report are related intratextually so that, for example, an organisation's goals are reflected in the design of individual campaign tactics.

Workshop activities involve students in analysing this insertion of academic texts into what is essentially a genre provided by professional practice. At the level of overall text structure, students examine and discuss where and why various sections of sample texts draw on academic theory. At a paragraph level, students analyse how and why writing may be either theory-centric or profession-centric. That is, the writing may thematise theory, with the professional or organisational domain providing an illustrative example of theory-in-practice; or on the other hand, may thematise professional practice, with theory positioned to support practical decisions, or to place the practice into a broader socio-economic and political context. At a sentence level, this means not only noticing author-centric or concept-centric citation structures, but also examining what might be called 'theory-centric' or 'professional-centric' presentation of decisions and strategies.

Writing in Engineering

This section describes a second year core subject in the Bachelor of Engineering degree course. The Engineering Faculty redesigned its undergraduate engineering degree curriculum in the late 1990s in response to changes in workplace practice and employers' expectations, specifically the need for Engineering graduates to have a broad range of technical and non-technical skills including communication skills. The resulting series of core subjects over the five years of the degree are designed to address theoretical and academic as well as practical and professional knowledges and intended to prepare students for professional, industry or organisational contexts. The 'real' world engineering workplace, in which engineers work in multi-disciplinary teams, is replicated in the way that these core subjects are taught across the degree program resulting in multi-disciplinary or cross-disciplinary tutorial groups. In other words, students from all engineering fields of practice study these core subjects in mixed tutorial groups.

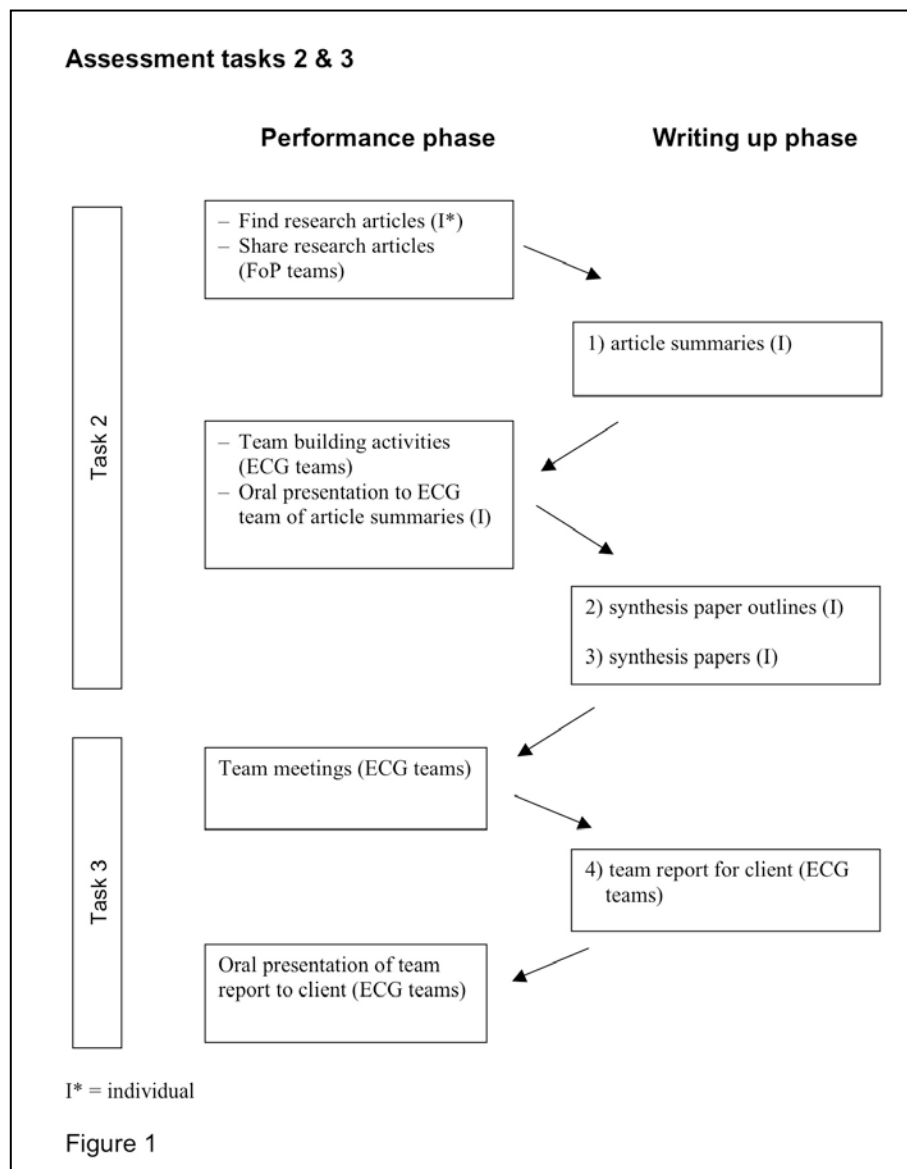
Engineering Communication

In 2004, the compulsory second year subject 'Engineering Communication' was further redesigned to reflect the 'new vocationalism' and support students in developing the transferable skills essential to operate effectively in contemporary engineering workplaces. Thus, the Subject Objectives focus on the relationship between the academic and vocational domains and the role that communication skills play between and within these domains. The central role of communication and documentation in engineering practice is highlighted and emphasis is placed on providing students with a theoretical framework for the development of their communication abilities in their academic work, professional engineering careers and personal growth (Subject Guide 2006, p. 3). Subject delivery reinforces the *knowledge how* rather than *knowledge about* approach as the subject tutorials are conducted in workshop mode and the role of the tutors is that of facilitators.

The subject outcomes include: understanding the basic principles, theories and practice of interpersonal communication; writing competently as an engineering communicator; participating effectively in group and team processes; and,

appreciating the central role of communication in engineering practice. These outcomes are met through the assessment tasks (four in total) ‘designed to ... explore some principles and theories of communication that are essential for effective professional practice’ (Subject Guide 2006, p. 9).

For the purpose of this paper, this section will focus particularly on how the interplay between the academic/theoretical and engineering practice/professional domains (knowledges) is made explicit in assessment tasks 2 and 3 which are designed around a semester long communication project. This project is based on a ‘real’ world professional engineering scenario which has an identified client (a professional engineering body) and need, and culminates in a team report and oral presentation. The tasks (2 and 3) are completed in a series of individual and teamwork based mini-tasks. This series comprises both ‘performance phases’ and ‘writing up’ phases which are interwoven and designed to support the students in leveraging their academic and practical knowledges to perform in teams and produce academic texts. The performance phase consists of two different types of performance: a collaborative performance phase (face-to-face interactivity) and an oral presentation performance phase. These phases inform and are informed by four writing up phases. This is illustrated diagrammatically (Figure 1) below:



In assessment task 2, the initial performance phase is grounded in student collaboration/teamwork. In the first half of semester, the tutors in each tutorial group place the students in Field of Practice (FoP) teams (for example, electrical engineering students are grouped together and so on). The first mini-task of assessment task 2, requires the students to conduct research individually with the support of these FoP teams. The students locate and read journal articles related to the communication project scenario and write individual summaries of their articles (writing up phase 1). They collaborate orally at this stage discussing, developing and refining their engineering topic and sharing resources.

In week five of semester, the students are reorganised into their multi-disciplinary Engineering Consultancy Group (ECG) teams in which they learn how to manage team and social processes in a range of teamwork awareness raising activities. Students also present their journal article summaries in mini-oral presentations to their ECG teams, sharing this information in order to write a synthesis outline (writing up phase 2) and paper (writing up phase 3). Thus, in all three writing up phases the students are collaboratively building new knowledge through their engagement with fellow students and with theoretical aspects of the topic and then writing up their findings individually.

In assessment task 3, this pattern of movement between the writing up phases and performance phases is repeated in their ECG teams. Following a series of team meetings, students write a client focussed team report. Although the report is loosely styled on a professional Engineering Feasibility report it relies more on the academic domain as the body of the report is based on the students' reading of the theoretical literature and identification of scenario related issues. The ECG teams are expected to write recommendations based on these issues; therefore, although these recommendations are drawn from an academic knowledge base they have to be practical and implementable, in other words, professional. A further tension in this writing up phase is the team report's audience; the students are writing for a specific client in the 'real' world but they are also writing for their subject tutor. This sometimes leads to confusion over which generic style they should select. This dual audience is also problematic when the students orally present their team report in the final presentation to their 'real' world client who is represented by the tutorial tutor.

The final written assessment (task 4) requires the students to write a reflection on their learning and the development of their communication skills during the semester. Writing reflectively encourages the students to use their analytical and critical skills to evaluate and articulate their learning particularly in the performance phases involved in the tasks. This focus on their interaction in teams and management of team processes involves helping students to develop a meta-cognitive awareness not only of the learning achieved but also of the generic skills that they have encountered through the process of bringing the professional and academic domains into dialogue.

Hybrid texts

As in the Humanities subject, the written texts the students produce in Engineering Communication demonstrate the hybrid textual practices that emerge from convergence of academic and professional domains. Writing the team report necessitates student engagement with multidisciplinary knowledges through their collaboration in FoP and ECG teams. In the tertiary context, engineering fields of practice (or communities of practice) operate independently and produce a

heterogeneous range of genres. Therefore, by working in multidisciplinary teams, 'students may more easily come to see that communication does not entail adherence to a set of universal rules but involves making rational choices based on the way texts work in specific contexts' (Hyland 2002, p.393).

In the final report, students also gain an awareness of the different requirements of engineering and academic report writing; for example, the role of the executive summary and recommendations in engineering reports and citation in academic reports. This understanding underpins and informs the report's design and organisation.

Building collaborative knowledge

This subject also clearly demonstrates the way that text production is interwoven with collaborative processes in the 'new vocationalism'. The students leverage their tacit technical knowledge in their FoP teams through their face-to-face interactivity and collaborate on every stage of the writing process in their ECG teams in order to produce a team report written in 'one voice'. As this requires a focussed yet flexible approach to their management of team processes the students are presented with the tools for managing team processes and given input on interpersonal skills. More specifically, in their ECG teams they participate in ice-breaking activities, identify the purposes of teamwork, and assess their individual team roles. They also agree on team ground rules, complete and sign a team contract and receive input on strategies for managing team processes including, for example, exercises in the 'forming', 'storming' and 'norming' stages of team work. This focus on teaming issues is intended to illustrate to the students 'that the course is as much about helping students learn about effective teaming as it is about producing a good final product' (Lewis *et al.* 1998, p. 151). This focus also satisfies the subject outcomes and objectives as learning to communicate (in both phases) is achieved through a collaborative process, in which the students experientially manage social processes, deal with conflict in their teams, and negotiate meaning to complete the tasks.

The students are provided with a subject workbook which has modules designed to focus attention on the various 'academic' and 'professional' genres required to complete the written assessment tasks. Sample texts are used to identify the sections and format of engineering and academic reports, and students' writing skills are developed through exercises on paraphrasing, summarising and synthesising. At a sentence level, students practise the language required to problem solve and suggest practical, technical and implementable solutions, and they also exercise their referencing and citation skills. Students who require additional writing support may self-select the tutorial group(s) taught by the academic language and literacy lecturer. The content covered in all the tutorial groups is consistent, but the students in this group have more workshop hours and thus more time is made available to provide writing support and feedback. For example, the students in these groups receive lecturer feedback both on their individual written tasks and teamwork drafts of the team report sections.

The subject workbook also incorporates a number of reflective writing activities which support the students in looking analytically at their teaming processes. Writing reflectively requires a different approach as the students need to articulate their own performance and experience rather than critiquing the ideas of others. Thus, they need to be taught the linguistic forms required to negotiate this shift from writing about the

concrete to the abstract (Dovey 2006, p. 397). As a caveat, the subject lecturers need to establish that it is the process of learning through reflection which is transferable to the workplace (Dovey 2006, p.396), not the genre of reflective writing and should beware of 'recipe following' (Boud and Walker 1998, p. 193, in Dovey 2006, p. 397).

Conclusion: new vocationalism and new texts

In the practice-based university, the new vocationalism is reflected in the writing tasks emerging in all faculties. In faculties as disparate as humanities and engineering, as the examples above have demonstrated, these writing tasks require academic and professional domains to be brought together in several ways. First, rather than mastering a stable body of disciplinary knowledge, students engage with workplace-like contexts and problems, and work collaboratively with fellow students or with professional contacts to apply knowledge to specific localised problems. Second, students are engaged in producing contingent, hybrid texts that borrow from a range of genres and employ an eclectic range of discourse features. Third, in the process of reflecting on their various learning tasks, students are encouraged to develop a transferable, higher level of awareness about the application of knowledges to real-world problems. Writing that shuttles between academic and professional domains is thus an exercise in understanding how knowledge is produced in a practice-based university.

Literacy teaching based on principles of choice and critique, negotiation and reflection suggests an engagement of learners with critical practice and transformation, rather than simply their induction into the generic practices of the public communications or engineering industries. It is in the process of working between different knowledge domains and texts that students can engage in *critical* practice, by using their theoretical knowledge to illuminate and critique professional practice, and by utilising their own experiential learning to compare and critique theoretical literature.

Appendix A

Structure of Campaign Strategy report (adapted from 2006 Subject Outline):

Executive summary

Table of Contents

1. **Introduction:**
 - description of organisation.
2. **Situation analysis:**
 - context or external environment of the organisation
 - analysis of internal environment of the organisation
 - context of the event/program/issue you are addressing in your plan
 - [may be supplemented by SWOT analysis in appendix]
 - client's brief
3. **Publics:**
 - identification of salient publics to be addressed + rationale
4. **Research:**
 - description of what you need to know + rationale
 - [can be separate section or distributed throughout relevant sections of the report]
 - assumptions or real findings from research conducted by the client
5. **Goals and objectives:**
 - goals and objectives of campaign (based on research findings)
 - how do these fit organisational vision and PR strategy
 - how do they address specific issue / problem
6. **Campaign tactics:**
 - description of tactics to achieve your objectives
 - description and rationale for planned publicity products
 - (news releases, media kits, leaflets etc).
 - basic plan for production + distribution of publicity products
7. **Evaluation:**
 - method for assessing whether the objectives will be met by this plan
8. **Budget:**
 - itemised budget estimating the major expenditures and resources
 - (personnel, time, equipment, etc.)
 - media costs should represent reasonable current market values
 - (may be summarised in body and detailed in an appendix)
9. **Timeline:**
 - tasks involved in the various aspects of your strategy
 - time allocated them
 - priority noted
 - PERT or Gantt charts
10. **Conclusion:**
 - explanation of what you have learned from this assignment

References [minimum of six]

Appendices

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