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Evaluating the effectiveness of an organisational communication assessment using frameworks from cognitive psychology and authentic assessment

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Evaluating the effectiveness of an organisational communication assessment using frameworks from cognitive learning theory and authentic assessment

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Abstract

This paper evaluates the learning aims and outcomes of a particular Organisational Communication assessment using frameworks from cognitive learning theory and authentic assessment. The assessment asks students to write a paper that describes and analyses the structure and culture of an organisation and makes recommendations for change using the research methods of interviews and observations. It is believed that the assessment develops students' ability to represent organisational problems at a deeper level since they are researching the values and underlying assumptions upon which organisations operate. Further, it is believed that the students as a group are producing a higher quality of work on this assessment because its authentic workplace features make it more relevant to them. Research from Stevenson (1994) on cognitive learning theory and from Gulikers, Bastiaens, and Kirschner (2004) on authentic assessment are used to evaluate the assessment.

Keywords: Organisational communication assessment, authentic assessment, organisational culture

Introduction

This paper discusses an Organisational Communication assessment in which students describe and analyse the structure and culture of an organisation and make recommendations for change after interviewing organisational members and making observations of a workplace. From a cognitive learning perspective, such an assessment is a useful learning activity because it develops students' ability to represent organisational problems at a deeper level since they are researching the values and underlying assumptions upon which organisations operate. In addition, professionally authentic aspects of the assessment make it for many students a more meaningful task than a case study or essay, which leads these students to produce a higher quality of work. In the long term, this learning is likely to help students develop more effective communication strategies and alternatives for solving problems when they enter the workplace. Indeed the questions asked in the interviews could be used over a lifetime in trying to understand the inner workings of organisations.

While such an assessment is not unique in organisational communication and management classes (for example, see Aksehirli, 2009), lecturers may find it of value to look at the author's particular assessment design to see whether it could be adapted to their own classes, and to consider how the assessment is working for students according to cognitive learning theory. To begin, the paper describes the assessment itself, and then explains its usefulness in moving students along the continuum from novice to expert in organisational communication. Finally, the paper presents some results from the students' research.

Assessment task: Description and analysis of the structure and culture of an organisation

Development of this assessment began with a survey of organisational communication assessment tasks in university websites and recent textbooks with the aim of finding alternative approaches that might better engage students and stimulate learning than assessments tried previously. In past semesters, the author had tried three other assessments, which were a group project in which the students provided written and oral reports that described and analysed the culture of a "real-life" organisation as portrayed in a television show, an essay in which students could select a topic of their own choosing, and an essay that students were to base upon an organisational issue found in a recent newspaper or magazine article. The assessment that revolved around a television portrayal of an organisation proved unsatisfactory because some students argued that the characters' behaviours were not authentic enough. Both of the essay-style assessments were unsatisfactory due to issues of controlling plagiarism with a few students.

As stated previously, this assessment was developed partly from one used by Huang (2006) at the University of Southern California, which is shown below:

> You will be asked to write a 6-page paper on the culture of an organization with which you are affiliated and how it enables and constrains communication within the organization. You are expected to integrate relevant concepts from the textbook into your analysis. You should at least use the following two sources of data in your paper: a) interviews, and b) your own experience. Make sure that you conduct at least three or four interviews with organizational members who play different roles in the organizations. You should ask them similar questions that would allow you to compare their perceptions and interpretations. You are also encouraged to use other sources of data in your paper (e.g., organizational documents like brochures,

pamphlets, employee handbooks). A paper that is based solely on your own experiences will fetch a C at best.

This assessment indicated that it is possible for students to learn something useful about organisational life through only a small number of interviews, and that organisational access could be simplified by asking students to contact past employers, friends, or relatives for data. It is not unusual for students to use such relationships to help them learn about organisational and business communication. For example, Mahin and Kruggel (2006) ask students to approach personal contacts to obtain service learning positions in which the students produce actual products or services for their contacts. In my subject, the assessment has received ethical clearance from the university, and all participant names and the names of any involved organisations are kept anonymous. Before any interviews, all participants are required to sign a formal letter of agreement with the university.

The assessment begins with this instruction:

> You will conduct between 3 and 5 interviews with organisational members to determine the organisation's structure and culture. You will also need to make observations of the workplace. Using the results of these interviews and your personal observations, you will describe how the structure and culture affect the way the organisation operates and performs its objectives. You will then use secondary research to analyse their structure and culture, and finally make recommendations for change.

The assessment then specifies that students ask the following questions during interviews, which may be conducted alone or in pairs:

1. What type of business is the organisation operating?
2. What is your role in the organisation?
3. What is the organisation's market?
4. How is the organisation structured? (What does the organisational chart look like?)
5. (To get a feel for the general climate, ask the interviewees two questions:) What are the 3 best things about working here? What 3 things need the most improvement?

6. If you had one story to tell about what is important to this organisation, what would that story be?
7. How do employees first learn about their jobs?
8. Does the organisation have any regular get-togethers, meetings, or parties? What happens during these events?
9. What does the organisation say is important to them? (What are their espoused values?)
10. What are the backgrounds of the managers?
11. What do you think is important in terms of doing your job well, being recognised, getting promoted?
12. Is there anything else you'd like to tell me about the organisation?

In your observations of the organisation, make note of the following:

13. What is the office space like?
14. What are the backgrounds, gender, and ages of employees? What kinds of people are welcome to work there?
15. How do people dress?

Questions 1-4, 6-11, and 13-15 are based on Carr-Ruffino's (1999) activity "Learning more about an organization's culture" (pp.56-57), which was designed particularly to help students consider how organisations include diverse groups. Questions 5 and 12 came from a communication auditing activity that was used by Donald Cushman at the University of Central Connecticut in the early 1990's in which the author participated as a student. While perhaps more aimed at assessing the climate than the culture, answers to Questions 5 and 12 should give students a good idea about what's currently important to people in their organisational lives and where organisations need some change.

For analysis, students are asked to use their textbook, which is Miller (2008), and at least four instructor-provided references, which cover the topics of organisations as cultures, leadership, and diversity in organisations. Students currently receive these resources: Badjo and Dickson (2001), Fix and Sias (2006), Guirdham (2005), Meyer (1995), Pacanowsky and O'Donnell-Trujillo (1983), Richmond and McCroskey

(2000), and Schein (2004). In addition, students may of course also locate resources of their own.

When writing their papers, students first describe then analyse the structure of the organisation, and then describe and analyse about three cultural themes that they found through their interviews and observations. To conclude, students are asked to make suggestions for improving the organisation.

The following sections evaluate the strengths of this assessment according to cognitive learning theory and then a branch of it known as authentic assessment.

Strengths of this assessment according to cognitive learning theory and authentic assessment

A key aim of modern education is to develop "competent students and future employees" rather than to simply help students acquire knowledge (Gulikers, Bastiaens, & Kirschner, 2004, p.67). Obviously, a course in Organisational Communication needs to help students develop workplace competencies, and a useful educational theory base for helping them is cognitive learning theory. This theory holds that learners construct their own meaning through the experiences that they have, and that education should be designed to help learners move themselves along the continuum from novice to expert in a field or domain. Researchers in cognitive learning theory have devoted much of their effort to understanding the nature of expertise and differences between novices and experts. It is thought that if these differences are known, then specific experiences can be designed to explicitly improve learners' knowledge and skills.

Stevenson (1994) said that expertise can be viewed according to five functional areas of thought, which are knowledge organisation, knowledge structures, problem representation, attention, and metacognitive skills. Table 1 compares these attributes of expertise for novices and expert practitioners in a field or domain. The assessment under discussion in this paper has the potential to develop students' abilities in all five functional areas, but it is especially aimed at knowledge organisation, structures, and problem representation.

Table 1. Attributes of expertise (Stevenson, 1994, p.17)

Functional area	Novices	Experts
Knowledge organisation	Conceptually isolated facts	Structured, systematic, linked, coherent chunks that are accessible at different levels of abstraction or understanding
Knowledge structures	Declarative, isolated from applicability, general domain-independent problem-solving procedures that make knowledge difficult to apply	Compiled procedures, bound to conditions of applicability or goals allowing large number of procedures to be initiated according to situation
Problem representation	Focus on surface features. Superficial view of problems	Focus on underlying principles. Problems seen in terms of the whole model or system and features which are inconspicuous in a superficial view
Attention	High demands made on short-term memory because of all the isolated facts which need to be considered	Much knowledge is chunked together or compiled thus reducing the requirement for short-term memory for the problem solving and general operation so that much of what an expert does has become automatic
Metacognitive skills	Little evidence of any metacognitive skills	Used in approach to problems, monitoring own performance, perceiving the degree of difficulty, apportioning time, predicting outcomes and controlling cognition

In Stevenson's (1994) framework, *knowledge organisation* refers to the amount of knowledge that a person has within a domain, and how that knowledge is structured and linked. According to the model, a novice's knowledge within a domain consists of "isolated facts" whereas an expert has chunked the information and developed abstract models of how it fits together that can be accessed at different levels. In the Organisational Communication course, students develop their knowledge of the subject material by learning each theory individually (eg. Likert's participative decision making, McGregor's Theory X and Theory Y, etc.), by chunking the theories together to show how they fit into schools of thought (eg. Likert and McGregor's theories both fit into a relational approach to managing), by contrasting theories and schools of thought with one another, by comparing the theories to students' own personal experiences and to examples provided in class, and by critiquing the theories.

Knowledge structure refers to the ability to effectively apply knowledge to particular situations. According to Stevenson (1994), novices are able to state their knowledge of a particular subject but are not yet able to apply it. In contrast, experts are able to correctly select and seamlessly apply knowledge to situations in their domain. In the Organisational Communication class, students develop their knowledge structure of the subject through practice in applying theories to a range of authentic case studies. For the assessment under discussion, students use theories from the class to explain how the structural or cultural features that they find in an organisation either help or hinder the organisation's functioning.

In Stevenson's (1994) framework, *problem representation* refers to how people understand a problem, select and enact problem-solving procedures, and present a

final solution. For novices, research shows that they focus on superficial aspects of problems whereas experts take more time to understand the deeper nature of problems before designing an approach to solving them. The assessment under discussion works to develop students' abilities to represent organisational problems at a deeper level by asking them to determine some of the values and assumptions that underpin communication in a particular organisation. I will return to this point in a moment.

The fourth functional area of Stevenson's (1994) framework for explaining expertise is *attention*, which refers to the number of discrete pieces of information that a person can hold in short term memory at one time. For novices, demands on attention are heavy because they have not yet developed well-chunked and linked knowledge of a domain. Therefore, novices need to be given problems that suit their level of ability so that they do not become overly frustrated. For the given assessment, the instructor attempts to decrease attentional demands by providing students with questions to use in the interviews, several resources for evaluating data, and by being available to discuss the data and review drafts.

The last functional area of Stevenson's (1994) framework is *metacognition*, which is a person's ability to monitor his or her own thinking. While Stevenson says that novices show few metacognitive skills, experts are able to judge the quality of their work, estimate the difficulty of problems, estimate how much time they will need for various tasks, and generally be successful at predicting how problems will be resolved. It is likely that the students with the strongest metacognitive skills are the ones who are most successful with the assessment under discussion and indeed with most other assessments. However, the instructor aims to help students develop

these skills by encouraging them to get an early start with their interviews, keeping up to date with class readings and tutorials, providing criteria sheets for marking, and providing detailed written and oral explanations of how to complete the assessment.

At the beginning of this paper, a claim was made that this assessment particularly develops students' ability to represent problems. To develop this ability, Jonassen (1997) recommends giving students authentic problems and letting them solve them in authentic ways. In the case of this assessment, the problems that the students are faced with are first to argue that certain values or basic assumptions are held by the organisation (eg. the organisation has "family" values), and second that the organisation has particular communication or cultural issues that could be solved in particular ways. Both of these problems are authentic because they are based upon life in actual organisations, and they require the type of thinking in which organisational members should engage to enact effective behaviour and change. Jonassen (1997) recommends that in solving problems of the type presented in this assessment, which he calls "ill-structured" problems, students should gather multiple perspectives on the problem, and that is exactly what students do through the interviews that they conduct for the assessment. Further, students should be able to include their own beliefs and opinions in solving problems, and that occurs in this assessment when students make recommendations for change.

Gulikers et al. (2004) provide another useful tool for reflecting upon the design of this assessment, which is their five-dimensional framework for authentic assessment. These researchers suggest that the level of authenticity of an assessment lies along a continuum, and it incorporates authenticity of task, physical context, social context, form, and criteria and standards. According to Gulikers et al. (2004), "an authentic

task is a problem task that confronts students with activities that are also carried out in professional practice" (p.71). In this assessment, the tasks could be carried out by anyone in a job, but are more typically taken on by people in management, training, or organisational development. Therefore, this assessment appears to have a high level of task authenticity, which should mean that it has a higher relevancy for students. This relevancy may explain why students are generally doing better work on this assignment than on case studies. A further explanation for the increased quality of work is provided by McDowell (1995) who said that students will see a task as personally meaningful if they see a link between it and their personal interests. When students examine organisations with which they already have some affiliation or they develop affiliation through their interviews, they are likely to see the work that they are doing as more meaningful.

In Gulikers et al.'s (2004) framework, the authenticity of the physical environment refers to how similar the assessment conditions are to professional conditions. For this assessment, the physical environment is somewhat authentic since students are asked to observe a real workplace environment, but it is not as authentic as actually doing a task within a workplace. It is, however, more authentic than preparing a case study and so this aspect of the assessment should also increase its relevancy to students.

The third element in Gulikers et al.'s (2004) framework is authenticity of social context, which is "that the social processes of the assessment resemble the social processes in an equivalent situation in reality" (p.74). Like the physical environment, there are elements of the social context that are authentic in this assessment, but it is not as authentic as conducting the assessment in a workplace.

The fourth element in the framework is the form of the assignment. For this assessment, the form is not professionally authentic, but it is academically authentic. The written paper helps students to link what they've found in a workplace to the theories that they are learning since it requires use of theory, organisational communication research, and reflection.

The final element in the framework is how well the criteria and standards meet professional workplace requirements. Gulikers et al. (2004) define criteria as "those characteristics of the assessment result that are valued" and standards as "the level of performance expected from various grades and ages of students" (p.75). For this assessment, the criteria would be highly authentic, since this type of thinking is highly valued in progressive workplaces. The standards, however, are academically set for this assessment.

In summary, the assessment appears to be highly authentic on measures of task authenticity; somewhat authentic on measures of physical environment, social context, and criteria and standards; and not professionally authentic in regard to form. These higher levels of authenticity as compared to other types of assessment such as cases and essays may be an important explanation for why the students as a group are producing higher quality of work on this assessment. Students appear to be more motivated by the assessment, but perhaps their true level can only be known by conducting a survey or interviews with them. This paper now turns to a brief review of work produced by a few of the students on this assessment.

Review of Student Work

For this assessment, students were able to identify a number of different leader styles and organisational values, and made thoughtful recommendations for organisational improvement. This section briefly reviews outcomes from three papers.

One student chose a restaurant for analysis, and discussed the leader's approachability and charismatic style. He also discussed how the values of treating other members as family and putting trust in them were seen in employee interactions. This student also mentioned how the female owner and mainly female staff members followed feminine values of power sharing and creating friendly relationships. The student's recommendations for change revolved around creating a better screening process for new employees because the head chef had only lasted for a few weeks and left in an uproar.

Another student wrote about the culture of a school, and noted core values of compassion and truthfulness in members' treatment of students and one another. She described the head of the school as a hero because of his charismatic qualities. Her biggest recommendations for change were to give more training to new teachers and to create more mechanisms for open discussion.

A third student wrote about an international wedding service. Her paper involved discussions of intercultural conflict between the service owners and their Australian vendors (eg. organ players, limousine drivers), and the different perceptions of workplace values that each of these groups held. According to the student, the service owners said that their core value was to satisfy customers while the vendors

said that the values were to follow the rules and keep costs low. To help this organisation improve internal communication, the student recommended developing an intercultural communication handbook.

Conclusions

For many reasons, it is useful to reflect on the mechanisms by which assessments help students with their learning. It is useful to discover what outcomes students are likely to achieve from an assessment, and where an assessment could be improved. This paper evaluated an organisational communication assessment that asked to students to describe and analyse the structure and culture of an organisation and make recommendations for change. It was evaluated in terms of cognitive learning theory, particularly Stevenson's (1994) attributes of expertise, and a branch of that theory known as authentic assessment. The assessment develops students' knowledge organisation, knowledge structures, and ability to represent problems in the field of organisational communication. Research on authentic assessment indicates that this assessment helps the students to achieve a higher quality of work because it involves a real task and communication with employees in a real work environment. More research could be conducted on how to help students evaluate the data that they collect in this assignment, link it to theory, and make recommendations for change.

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