



## TEACHING AND LEARNING ORAL PRODUCTIVE SKILLS TO MEDICAL STUDENTS

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### ABSTRACT

This paper explores research on teaching and learning oral production skills to medical students. Research in this area is expanding rapidly. However, to date, few studies have critically investigated this body of work. The author reviewed key findings from influential studies. The author's analysis revealed that although these studies are subject to limitations, medical students' oral production skills can be enhanced to improve the learning of the subject. Contemporary literature on the issue hypothesize that the enhancement of oral production skills is beneficial for helping teachers teach well and learners understand. The article concludes by identifying potential areas for further research.

**Key words:** oral production, classroom communication, oral production skills, learning activities, ESP teacher.

### Introduction

Due to the rapid advancement of science and technology as well as the rate of medicine growth, medical students need to go beyond what students in the past have needed. They must be able to interpret and use knowledge to make sense of information and complex situations. They also need to develop and hone their skills through deeper understanding of concepts and processes, solve problems by reasoning and oral production. Therefore, this paper advocates for drawing lessons from research in as far as the enhancing of oral production skills in medical students is concerned. This is on the premise that oral production is one of the most effective methods of improving the performance of medical students. The paper focuses on the oral production skills where the grasping of concepts is essential to student learning. The paper provides a rationale for oral production across the curriculum. Further, the paper draws from research how using oral production can enhance the teaching/learning of medicines.

### Theoretical framework

This paper uses the main theory on language used in m oral production by Vygotsky (1962), who asserts that language is indispensable in learning as it is the logical and analytical thinking tool. This is because thoughts are not merely expressed through the words but are created through it. Although language may not be essential for the creation of basic concepts, it is needed to build higher concepts. He further advocates that learners can reconstruct objective knowledge as subjective knowledge through social negotiation with knowledgeable others, books, or their peers and students. In this study, as the researcher reviews literature, the question whether students' oral production can be enhanced to build or reconstruct medical knowledge would be tracked.

### Why oral production is important for medical students.

The importance of oral production skills can never be underestimated. Communication is a key part of students' learning and teaching. The communication skills that students learn now can benefit them in the future. Students need to be able to communicate with their ESP teachers and their peers. Understanding



vocabulary can help to become better communicators. In this light this section of the discussion is going to explore the importance of oral production skills for medical students.

Oral communication refers to words and articulations (Gamble & Gamble 2010). It is important that an educator is able to understand students' knowledge of a medical concept. One way to do this is by asking open-ended questions and ESP teachers can stimulate students' growth of medical knowledge through the ways they ask and respond to questions (Piccolo, Harbaugh, Carter, Capraro, & Capraro, 2008, p. 380). Thus, an articulate ESP can indeed ensure this.

It can be argued that ESP teachers must help students clarify their statements, focus carefully on problem conditions and medical explanations, and refine their ideas. Students need to feel comfortable talking about their understanding in order to become better students. As an educator, it is important that one does everything that one can to help students be comfortable in the classroom. The more comfortable they are, the more they may be willing to communicate. Therefore, Sherin (2000, 122), rightly argues that ESP teachers are encouraged to provide opportunities for students to discuss their ideas about medicine and to listen closely to what students say. It is important to listen to students when they communicate so they can be encouraged and helped in their task of solving medical problems.

Communication is not just vital for the medicine classroom, but in all classrooms. Therefore, all educators must be aware of the importance of being able to communicate with students, to have students communicate with one another, and to have students understand what they are communicating about. Kabasakalian (2007, 843) correctly contends that "the need for meaningful classroom discourse is now universally accepted among educational researchers, and ESP teachers are encouraged to use 'higher order' questions." Thus, oral communication skills are key skills for any ESP teacher and student alike. Educators have to be willing to push students to become good communicators.

Further, Baroody, (1993) and Gardner, (1983) also viewed communication skills and the ability to think and solve problems scientifically as the most valued skills in educational practices globally presently. Hence, ESP teachers need to communicate their medical language effectively while they are engaged in the process of active construction of knowledge as medicine is a language and science of patterns (Washington State Instructional Materials Review, 2006) and its symbols and vocabulary are universal means of communication about relationships and patterns. It is a mode of inquiry that relies on logic, observation, simulation and experimentation to challenge and extend our current understanding. Therefore, ESP teachers ESP for medicine need to learn to share ideas and clarify their understanding of medicine while they form medical ideas when they reflect, discuss, modify, and explain the conceptual structure to their peers. This cycle of analytical and systematic reasoning will eventually reinforce and strengthen their knowledge and understanding of medicine, thus causing them to think deeply and this could help in their teaching and learning.

'Scholars have strongly argued that ESP teachers' growth evolved interactively through a process of enaction and reflection, when they think and communicate (Huang & Bao, 2006; Clarke & Hollingsworth, 2002).

Therefore, the secret to successful teaching is being able to determine what students are thinking and then using that information as the basis for instruction. ESP Teachers learn what students are thinking through student oral production. When students communicate medically, either orally or in writing, they make their thinking and understanding clear to others as well as to themselves. In the early grades, students' thinking about medicine is often difficult to explore, primarily because students' skills in talking and writing are just beginning to develop and because their experience of communicating about medicine is new. Throughout the



primary grades and into the junior years, however, students gain more experience and are given many opportunities to acquire an increasing number of strategies for demonstrating what they understand medically and demonstrating the process they used to find a solution. Having students communicate medically helps ESP teachers to:

- gauge students' attitudes towards medicine;
- understand student learning, including misconceptions that students have;
- help students make sense of what they are learning;
- recognize and appreciate another perspective.

When communication is emphasized in the medicine program, students also have many opportunities to develop and reinforce their literacy skills. In order to investigate medical concepts and solve medical problems, students need to read and interpret information, express their thoughts orally and in writing, listen to others, and think critically about ideas. Many of the communication strategies described in this article are not unique to medicine learning – they are instructional techniques that can be used across the curriculum.

In summary, oral communication skills can be argued to be essential not only in the medicine classroom but across the curriculum as it fosters students understanding and learning. Through questioning, explaining, sharing ideas, describing, justifying, and defending; students participate in these actions in an active, focused, and purposeful way, thus, they are furthering their understanding of medicine.

#### **Review of literature on the enhancement of oral production skills to medical students**

This section of the discussion reviews four articles of research in the teaching and learning of medicine. These articles have been chosen purposefully as they deal with the enhancement of oral communication skills in the teaching and learning of medicine. In reviewing these articles, the researcher is particularly concerned with that part that is telling and informing when it comes to ways in which the oral communication skills of medical students can be improved.

Peterson's (2005) "Student Teaching In Japan: The Lesson," shows that it is clear from the observations he made that the focus of student teaching at the schools is on the lesson. In using the term lesson, he argues, it would be valuable to use it in the context of the Japanese word for lesson which is *jugyo*. In Japanese, *jugyo* means teaching, instruction and school work as well as lesson. Thus, to say that the lesson is the focus of Japanese student teaching, it does not mean just the physical, written out lesson plan, but the whole process of teaching a lesson from preparation to teaching to reflection. In this process, the student ESP teachers also gain experience observing lessons where they focus on student thinking, the content of the lesson, the sequencing of ideas and not just the presentation of the lesson. One component of the interactions between the cooperating ESP teacher and student teacher was a continual emphasis on how the students were making sense of the problems and questions presented. Cooperating teachers frequently asked questions like "How will the students answer that question?" or "what was the student's understanding when he made that comment?" These types of questions shaped the direction of each lesson and meeting between cooperating teachers and student teachers.

From the above it is also clear that indeed the interactions (thus oral communication skills) are indeed vital in the development of the ESP teachers as they also go a long way to aide students learning of medicine.

Research has shown that lesson study can indeed enhance medical students' oral production skills. The two articles so far reviewed attest to that effect, that lesson study does enhance medicine Es' oral



communication skills in particular and communication skills in general. Thus the researcher has felt it could be pertinent to elaborate how lesson study collaboration enhances medical students' oral production skills.

To begin with, Yoshida (1999) first coined the word "lesson study", which is derived from the Japanese word "jugyokenkyuu", i.e., "jugyo" means lesson and "kenkyuu" means study or research. Lesson study provided a platform of systematic inquiry into teaching practice. It became a quality cycle for establishing long-term goals, where each piece of work is measured against the goals, thereafter changes are made accordingly (Fernandez & Chokshi, 2002; Richardson, 2001; Yoshida, 1999) Lesson study is not merely a professional development activity (Watanabe, 2002) but rather became a culture whereby ESP teachers communicated with one another, resulting in deep reflection on subject, students and instructional approaches. Lesson study enhanced and generated new knowledge through practical inquiry (Franke, Carpenter, Levi, & Fennema, 2001; Stigler & Hiebert, 1999).

In addition, lesson study helps ESP teachers build conceptual knowledge, especially when they explored different ways to approach the subject or a particular topic. Teachers started by examining the contents deeply to find connectedness across grades by searching between lines in text-books so that they can integrate the details and content for the lesson (Clarke, 2006; Takahashi, 2006). This collaboration provided the teacher with the time and structure to focus on her students and develop appropriate strategies based on their needs, besides analysing and improving teaching and learning of even the most challenging unit (Ball & Cohen, 1999).

Furthermore, Lesson Study enabled ESP teachers to collaborate and internalize learning to teach (Watanabe, 2002; Peterson, 2005). His peers and knowledgeable others could contribute to his growth (Ross & Bruce, 2007). Through this process, teachers became be more observant and focus on meaningful problems, which are linked to real-life ones which students can relate to. Therefore, from the above it is evident that research has shown that one way of improving medicine teachers' communication skills is through the lesson study mode.

Another article reviewed, "Look Who's Talking- Incorporating oral presentations into medicine" by Anne B D'Arcy-Warmington (2008, 2) argues that "...simply speaking, the problem is *we are not speaking* (the italics are my emphasis)." The solution is true collaboration by both student and medicine educator which may require a radical change in the administration of tutorials. This change is required for true two-way conversation to take place. Students need to be aware that the first step to medical comprehension is talking about medical concepts rather than a written solution. Public speaking is enemy number one in medicine sessions as students would gladly attempt endless written questions rather than have to find words to explain their medical ideas. To overcome fear and shyness, students must be introduced slowly to the idea of discussing concepts instead of solutions. Emotions play a major part in learning, especially in medicine, so a top priority is to create a friendly social atmosphere from day one where students employ their interpersonal and linguistic intelligences. Both tutor and student need to adapt to this social aspect not as an 'add-on' component but as an integral enhancement to learning.

D'Arcy-Warmington also goes further to argue that it is important to consider the merits of oral presentations in medicine service units as students' educational needs are diverse. Reaching parts of the brain that usual educational methods do not reach may be the answer to those poor students who do not have a 'medical brain'. The theory of multiple intelligences and brain-based learning may be the tool that will aid these students to be more confident about their medical ability. A broad knowledge and appreciation of medicine is required. So examination questions that are easily solved by rote learning and algorithms will not have any educational advantage to these students in their chosen field. Oral presentations provide all students



with a chance to display their knowledge in fun and creative ways. The interest aroused when researching the topic may give rise to a new curiosity about medicine. With the declining numbers of students wishing to study medicine perhaps an injection of creativity in service units may spark an interest in medicine in these and other students.

In addition, another article: "Integrating Oral Presentation into medicine Teaching and Learning: An Exploratory Study with Singapore Secondary Students" by Fan Lianghuo Yeo Shu Mei was also reviewed. In this paper, they introduced an exploratory study on the integration of oral presentation tasks into medicine teaching and learning in five classes taught by different teachers in two Singapore secondary schools over a substantial period of time. From the results obtained from this study, it appears that although both teachers and students encountered initial difficulties and challenges, with necessary experiences and skills over time they can overcome them and become quite effective in using oral presentation in their teaching and learning, therefore oral presentation can be reasonably implemented in medicine classrooms. The results also showed that both teachers and students overall developed positive views about the benefits and usefulness of using oral presentation tasks into their daily medicine teaching and learning.

These positive views, it can be argued are related to the nature and pedagogical values of oral presentation activities. It was also observed in the study that, to effectively integrate oral presentation into the process of medicine teaching and learning, both teachers and students should take various roles and responsibilities during the engagement. In particular, teachers' beliefs, behaviour, reaction and verbal responses to students' speech attributed to the effectiveness of using oral presentation in medicine teaching. Teachers need to recognize that opportunity for students to be involved in active and meaningful verbal communication is an essential process for their learning and knowledge acquisition. They also need to give students necessary guidance (including make clear the expectations) especially at the initial stage, and more importantly, create encouraging classroom environment for students to engage themselves in such communication.

Finally, given the fact that the use of oral presentation tasks is relatively new to many teachers and students, and in fact, to the general school system about teaching and assessment in Singapore classroom settings, it seems clear that timely evaluation, fine-tuning work and systemic reform in school assessment are important for the effective integration of oral presentation in teaching and learning in the long run, and this may take a long time to develop. Nevertheless, from this study it can be believed that given necessary help and guidance for teachers and students, it is not only meaningful but feasible to integrate oral presentation tasks into medicine teaching and learning.

### Discussion

The studies analysed in this discussion have been consistent in demonstrating that many of the constructs hypothesized in communication skills studies can be implemented to a good outcome. The lesson study has been affirmed by the first two researchers analysed to contribute immensely to the improvement of teaching and learning of medicine. Peterson (2005) in an earlier study contends that the lesson study collaboration used as part of teacher training in Japan has commendable benefits in the enhancement of ESP teachers' oral communication skills. These benefits have been clearly outlined in a later study by Ong, Lim and Ghazali (2008) when they argue that the lesson study collaboration improved the teachers' verbal communication skills through group discussions, teachers' participation, discussion, arguments, reactions, compromises or consensus, changes attempted and realized or aborted. They also argued that through this lesson study collaboration, students have become more confident, inquisitive and enthusiastic for the job market. Again, they attest that the teachers involved in the study can now think critically and creatively,



enhanced their questioning strategy, solve problems and have the ability to adapt themselves to an ever-changing global environment. Furthermore, after the collaboration process, it is argued that teachers reduced code-switching and managed to share eloquently.

The second set of similar research in the enhancement of teachers' oral communication skills through oral presentations also made interesting and informing reading. Firstly, Lianghou and Shu Mei (2007) in their argument for the integration of oral presentation tasks in the teaching and learning of medicine to secondary school pupils, propound that this integration has proven vital as oral presentation tasks help students understand and learn medicine. The teachers interviewed generally felt that as long as an oral task was appropriately designed to measure students' specific learning outcome, then the oral task could be used as a measurement about students' learning. These teachers also felt that some of the conventional tasks could be replaced by oral presentation tasks. For instance, one teacher pointed out that "[oral presentation tasks are] a reliable source to find out from students whether they had internalized what they had learnt rather than just solve questions.

Secondly, D'Arcy-Warmington (2008) advocates for the enhancement of oral communication skills through a radical change in the administration of tutorials to encourage a true two-way conversation, that is, between the tutor and among the students. In addition, the scholar argues that students comprehend medicine through talking about medical concepts rather than a written solution thus oral communication skills become hand for the teacher and eventually the student. This is so as the teacher then encourages the students to discuss the concepts instead of the solutions. These discussions have been seen to create a friendly social atmosphere to counter emotional barriers that might hinder learning as students employ their interpersonal and linguistic intelligences to aide them in their learning. Further, D'Arcy-Warmington (2008) also argues that oral presentations can help students understand medicine better as they provide students with a chance to display their knowledge in fun and creative ways.

Therefore, it is evident from the above discussion that oral communication skills can be enhanced in the medicine classroom for the improvement of the teaching and learning of the subject.

### Conclusion

The study has been a discussion of the lessons that could be drawn from research in as far as the enhancement of ESP teachers' oral communication skills. Four articles have been reviewed. Two of these mainly emphasized that indeed medical students' oral communication skills can be enhanced through the lesson study collaboration process both in the teacher-training programmes as well as a way of upgrading and developing practising teachers through refresher courses. The other two studies have argued for the integration of oral presentation tasks in the teaching and learning of medicine so as to enhance both the student and the teacher's oral communication skills as they entail a creative and fun filled way of learning. Be that as it may, these findings are yet to be documented in as far as the Zimbabwean context is concerned. Therefore, the researcher is calling for scholarly inquiry into filling of this lacuna.

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