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TEACHING SKILLS OF THE BUSINESS EDUCATORS IN THE 21ST CENTURY OUTCOMES-BASED EDUCATION: BASIS FOR AN INTERVENTION PLAN

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ABSTRACT: This research aimed to comprehensively evaluate the teaching competencies of educators within the College of Business at a tertiary institution in Northern Mindanao during the 2016-2017 academic year, within the context of 21st-century outcomes-based education. The investigation concentrated on three crucial competencies: pedagogical knowledge, content knowledge, and technological knowledge. Employing a descriptive non-comparative study design, the research sought to discern any significant differences in teaching skills when educators were categorized by discipline/academic program, educational qualifications, and years of teaching experience. The imperative to scrutinize the teaching skills of business educators arises from the necessity to maintain competitiveness and align with the evolving landscape of business opportunities and risks. It is crucial to ensure that business educators are well-informed about contemporary trends, enabling them to offer relevant insights in the dynamic market environment and formulate up-to-date business training proposals and programs. This investigation encompassed all business educators based at the main campus of the tertiary institution in Northern Mindanao. The findings revealed a commendable proficiency level among business educators in pedagogical knowledge, demonstrating a high degree of competence. Similarly, their expertise in content knowledge was deemed extensive, and their adeptness in technological knowledge was notably demonstrated. Notably, when the teaching skills were compared across different competencies, variations were observed only when educators were grouped by discipline/academic program, with discernible differences in pedagogical knowledge, content knowledge, and technological knowledge. Conversely, no notable variations were discerned when educators were categorized by educational qualification and years of teaching experience. This study underscores the importance of continuous research on the teaching skills of business educators in the context of 21st-century outcomes-based education. Such ongoing research endeavors can act as catalysts for the development of innovative pedagogical methods and resources tailored specifically for outcomes-based education environments in business education. By enhancing the teaching skills of business educators, the overall quality of instruction can be substantially elevated, resulting in improved student learning outcomes and heightened preparedness for the demands of the 21st-century workforce. The research findings can serve as a foundation for evidence-based interventions targeting specific skill areas, ultimately improving teaching effectiveness and positively impacting student learning experiences.

Keywords: Teaching Skills, Business Educators, Pedagogical Knowledge, Content Knowledge, Technological Knowledge

1. INTRODUCTION

The landscape of education and educating students is significantly changing over these recent years. Each country values education because it is the way for upward social and economic mobility [1]. Industry, virtual workplaces and digital market platforms emerge as the centrality of business education. Businesses predict that markets will continue to be increasingly liberated, industries will be steadily deregulated, technologies will be exponentially advancing resulting to a globalization that continues to be relentless in ways unimaginable. As a result, the changes in business and industry paradigm shift learning outcomes, learning space requirements, and teaching competence.

It is then the aim of the paper to challenge traditional models of education focusing on the emerging knowledge that is fundamental for teaching a digital generation. The core focus of the study is on business educators three knowledge bases relevant to business education namely the content, pedagogy, and technology knowledge. A closer investigation also identified which discipline and demographics could significantly vary the faculty's teaching skills.

1.2. Framework of the Study

The study supports the concept of Shulman's construct of pedagogical, technology and content knowledge. Pedagogical Knowledge is the teachers' knowledge of the practices, processes, and methods regarding teaching and learning. It goes beyond the purposes, values, and aims of education, and may apply to more specific areas including the understanding of student learning styles, classroom management skills,

lesson planning, and assessments. Content Knowledge is the teachers' own knowledge of the subject matter, that is, the principles, concepts, theories, best applications, serious issues and innovations in the field. Technological Knowledge refers to the teachers' knowledge of, and ability to use, various technologies, technological tools, and associated resources to assist learning and sustain continual independent learning. The teaching competence of the business education faculty may vary given their discipline and socio-demographic factors which includes years of experience and educational qualifications.



Figure 1: Framework of the study

1.3. Objectives

The research assessed the teachings skills of the business educators in the three knowledge bases, namely, the content,

pedagogy, and technology knowledge. A closer investigation also identified which discipline and demographics could significantly vary the faculty's teaching skills.

2. METHODOLOGY

This study used the quantitative non-experimental design. It is a descriptive-comparative study focused on the teaching competence for an outcomes-based business education. It assessed the teaching skills of the business educators of Tertiary educational institution in Northern Mindanao to affect a 21st Century outcomes-based education. It looked into the variations in the teaching skills of business educators according to their discipline/academic program, educational qualification and numbers of years in teaching experience.

The study is conducted in the Tertiary educational institution in Northern Mindanao during the Second Semester of School Year 2016-2017. Participants included all the business education faculty of tertiary institution in the total of fifty-one (51) business educators of the four (4) undergraduate academic programs on business administration program, hotel and restaurant management program, the public administration, and the accountancy program.

The researcher-made instrument was validated by three experts [2]. The instrument used in the study primarily references from the principles and concepts of the three knowledge bases within the framework of the 21st Century Outcomes based Business Education. The instrument measured the teaching skills in pedagogical knowledge, content knowledge and technological knowledge.

3. RESULTS AND DISCUSSION

Table 1 shows high teaching competence on the pedagogical knowledge of the business educators in the 21st century outcomes-based education. The business education faculty are highly competent in teaching to student learning styles, classroom management skills, lesson planning, and assessments. The demonstration of pedagogical knowledge is manifested in the classroom strategy used by the educator in delivering the lessons to the class. One of the teaching strategies with pedagogical knowledge component is classroom management. It includes maximizing the quantity of instructional time, handling classroom events, teaching at a steady pace, maintaining clear direction in lessons. Using the appropriate teaching method to capture the interest and to engage the learners are tools that can help the educator achieve good classroom management [3].

The faculty best demonstrated on the use interactive teaching strategies that highlight the practice and development of collaboration. The educators are equipped in utilizing their teaching skill that enables the students to learn effectively through group activities compared to individual outputs. Sometimes, they even manifest better learning outputs in a group than when they are learning alone. That is why the educator makes use various interactive teaching strategies to engage the students and to draw the best learning outcomes. In the workplace, collaboration enables the individuals commit to the organization achieve its goals and objectives. It is the engagement of people that makes the organization competitive and successful

Table 1. The Teaching Skills of Business Educators in the 21st Century Outcomes -based Education on the Pedagogical

Knowledge				
Pedagogical Knowledge	Mean	Sd	QD	
I use interactive teaching strategies	4.22	0.81	Very High	
in the class, e.g. group work, pair				
work, team presentations, panels,				
etc.	4.14	0.60		
I can adapt my teaching based-	4.14	0.69	High	
upon what students currently understand or do not understand.				
I know how to assess student	4.08	0.80	High	
performance in a classroom.	4.00	0.00	Iligii	
I know how to organize and	4.08	0.80	High	
maintain classroom management.			8	
I can adapt my teaching style to	3.96	0.72	High	
different learners			C	
I can use a wide range teaching	3.92	0.91	High	
approaches in classroom setting				
(collaborative learning, direct				
instruction, inquiry learning, etc.)	• • • •			
I can assess student learning in	3.88	0.93	High	
multiple ways.	2.00	0.74	TT: 1	
I am familiar with common student understanding and misconceptions	3.88	0.74	High	
I introduce new or experimental	3.78	0.90	High	
teaching strategies in class	3.76	0.70	High	
I use business simulations games in	3.76	1.12	High	
class, e.g. experiments, role play	• 1, 0		8	
I use assignments to require	3.69	1.09	High	
students to identify potential				
business ventures				
I assign case studies that relate to	3.55	1.19	High	
business management and				
operations	2.40			
I assign research projects related to	3.49	1.17	High	
the world of business and				
economics I use materials from local	2 40	1.10	III ala	
I use materials from local newspapers and periodicals to	3.49	1.10	High	
develop case studies for use in my				
class(s).				
I require the students to do a	2.86	1.17	Average	
business plan for a personal or		-	8-	
school-based operation				
Overall	3.77	0.96	High	

Table 2 shows high teaching competence on the content knowledge of the business educators in the 21st century outcomes -based education. The business education faculty demonstrated mastery in the in the subject matter, that is, the principles, concepts, theories, best applications, serious issues and innovations in the field. Content knowledge is one of the important factors influencing the teaching and learning effectiveness. Business educators especially those with industry experience demonstrate both theoretical and practical knowledge. Teachers who are highly knowledgeable are often thought to be better able to create higher achieving students [4]. Literature supports that teachers' content-related knowledge is a key factor influencing the learning progress of students [5]. In addition, it is also observed that teachers' subject knowledge exerts a statistically and quantitatively significant impact on student achievement [6]. Students who become employed demonstrate then strong specialization and highly technical skills. They can further demonstrate effective

problem-solving skills and contribute to business solutions and innovation in industry.

Table 2. The Teaching Skills demonstrated by Business Educators in the 21st Century Outcomes Based Education Content Knowledge

Content Knowledge				
Content Knowledge	Mean	SD	QD	
I have the knowledge and	4.16	0.70	High	
understanding of my main subject				
field(s)				
I have the ability to design the content	4.14	0.83	High	
and develop the course to promote				
understanding of actual application of				
the subject to real life operations.				
I can use creative ways and means to	4.14	0.80	High	
connect and convey content using				
actual, real and local scenario.				
I can articulate thoughts and ideas	4.06	0.83	High	
about the subject and effectively				
convey the same using oral, written				
and nonverbal communication skills.				
I have sufficient knowledge about	4.06	0.79	High	
relevant concepts of the subject				
matter.				
I know concepts, facts, theories and	4.06	0.76	High	
procedure within the (the particular				
content)	4.04			
I have sufficient knowledge about	4.04	0.73	High	
structure of knowledge in the given				
subject.	4.00	0.01	*** 1	
I have the ability to interweave the	4.02	0.81	High	
content of the subject matter with				
other courses	2.06	0.00	TT' 1	
I have the ability to analyse the	3.96	0.89	High	
impact of principles and concepts to				
the 21 st century environment/future				
work force.	2.06	0.07	TT: -1.	
I can use the (the particular subject)	3.96	0.87	High	
as the way of thinking	2.04	0.72	TT: -1.	
Have the knowledge and	3.94	0.73	High	
understanding of instructional				
practices (knowledge mediation) in				
my main subject field(s) I can implement innovation in a	3.88	0.91	Цiah	
•	3.00	0.91	High	
variety of forms to convey the context I can synthesize and make	3.86	0.96	High	
connections between present	3.00	0.90	mgn	
information/studies and previous				
studies about the subject (data				
mining) to connect relevant details				
and reasons of further studies.				
I have sufficient knowledge regarding	3.86	0.96	High	
basic principles and processes	5.00	0.30	mgn	
involving business education.				
I know concepts, facts, theories and	3.53	1.51	High	
procedure within (the particular	5.55	1.31	mgn	
content)				
Overall	3 09	0.64	High	
Overall	3.98	0.64	High	

Table 3 shows high teaching competence on the Technological content knowledge of the business educators in the 21st century outcomes -based education. The business education faculty strongly demonstrated knowledge of, and ability to use, various technologies, technological tools, and associated resources to assist learning and sustain continual independent learning. To respond to the challenges of

globalization, an educator must have Technological Knowledge. Educators are expected to prepare a digital generation of students for transition to this new workforce by teaching them 21st century skills which includes technology literacy [7]. This is support by a study which finds that an instructor can be updated in his field by the use of appropriate technology to generate information such as computers, audio visual devices, electronically operated and various multimedia equipment [8]. It is also found out that technologybased learning provided better support to students as compared to traditional-books-and-blackboard classrooms [9]. The complexity of technology integration comes from an appreciation of the rich connections of knowledge among the other components namely content knowledge and pedagogy knowledge in ways they are applied in multifaceted and dynamic classroom contexts.

Table 3. The Teaching Skills demonstrated by Business Educators in the 21st Century Outcomes Based: Technological

Knowledge			
Technological Knowledge	Mean	SD	QD
I can learn technology easily to utilize	4.08	0.89	High
technology as a tool to teach and			
communicate for classroom			
instruction.	4.04	0.94	High
I can use technology as a tool to organize and record information for	4.04	0.94	High
easy retrieval of information.			
I can use digital technologies	3.96	1.08	High
(computers, media players, etc.),	3.70	1.00	111511
communication/ networking tools			
and social networks appropriately to			
access and manage information for			
classroom enhancements.			
I can understand, create and utilize	3.88	0.84	High
the most appropriate technology			
related material to convey diverse			
topics and simulation to integrate information.			
I can learn and keep up with new	3.78	0.94	High
important technologies.	5.70	0.71	mgn
I can apply fundamental	3.71	0.99	High
understanding of the ethical/legal			Č
issues surrounding access and use of			
information technologies. (e.g. give			
credit to the author)			4
I had sufficient opportunities to work	3.63	0.96	High
with different technologies.	3.61	0.04	High
I can use technology in the development of strategies for	3.01	0.94	High
development of strategies in solving			
problems in the real world.			
I know about a lot of different	3.51	1.03	High
technologies.			
I have ability to design webpages and	2.55	1.19	Average
use authoring software.			
Overall	3.67	0.83	High

Educators, especially those in the field of business are expected to have a higher level of technological knowledge to engage today's generation of learners to learn 21st century skills. This is an imperative if the students are to be prepared to be part of the 21st century workforce. Across all programs in the college, it is already a second nature for the instructors

to make use of technology in classroom activities such as the use of projectors, DLPs and other computer-aided technology in their daily classes.

The different core subjects of the Business Administration program require a knowledge of modern technology applications. In financial management subjects for example, students need to be taught how to do online banking and how to access the virtual banks. The rise and fall of market values of investments requires access to digital platforms, of which, the students have to learn and master. This cannot be taught if the educator is also not knowledgeable about it.

Table 4. Summary Table of the Teaching Skills of the Business Educators

Educators				
Area	Mean	SD	QD	
Content Knowledge	3.98	0.64	High	
Pedagogical Knowledge	3.77	0.96	High	
Technological Knowledge	3.67	0.83	High	
Overall	3.81	0.65	High	

A closer look at the results revealed that although all three skills displayed high ratings indicating that the skills are highly demonstrated, the skill with the highest mean is the teaching skill on content knowledge and the skill with the lowest mean is the teaching skill on technological knowledge. The teaching skills of the business educators in the 21st Century Outcomes-based education on the competencies of content pedagogical knowledge, knowledge, technological knowledge are all highly demonstrated. Transformation of the subject matter for teaching is a central notion of the framework and occurs as the teacher interprets the subject matter, finds multiple ways to represent it, and adapt and tailors' instructional materials to alternative conceptions and students' prior knowledge [10].

In fact in Content Knowledge, the Business Administration faculty rated highest and the Accountancy second highest; the Public Administration faculty rated highest in Pedagogical and Technical Knowledge. However, both the Business Administration and Public Administration faculty demonstrate equally high teaching skills. Educational qualifications and the teaching experience do not significantly vary the three teaching skills. Although advanced studies and many years of teaching experience may be an advantage, all faculty need to meet the same standard of quality education.

The teaching skills of the business educators in the 21st Century Outcomes-based education on the competencies of pedagogical knowledge, content knowledge, and technological knowledge are all highly demonstrated. Transformation of the subject matter for teaching is a central notion of the framework and occurs as the teacher interprets the subject matter, finds multiple ways to represent it, and adapt and tailors' instructional materials to alternative conceptions and students' prior knowledge [10].

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Table 5. Means and P-Values to Show Comparison of Means of Business Educators' Teaching Skills

Profile Characteristics	Pedagogical stics Knowledge		Content Knowledge		Technological Knowledge	
of	ILIONI	,050	Kilowicage		Kilowiedge	
Business Educators	X	p-value	X	p-value	X	p-value
By Discipline						
Business Administration (n=28)	4.08		4.18		3.90	
Accountancy (n=10)	2.99		3.45		2.83	
Hospitality Management (n=7) Public	3.49	0.000**	3.86	0.017**	3.67	0.002**
Administration (n=6)	4.10		4.03		4.02	
By Educational Qualification Undergraduate Degree Holders (n=5) Ongoing Master's Degree (n=16) Master's Degree Holder (n=8) Ongoing Doctoral Degree (n=17) Doctoral Degree Holder (n=5)	3.35 3.71 3.74 3.86 4.28	0.287 ns	3.89 3.83 3.98 3.95 4.61	0.215 ns	3.14 3.72 3.48 3.81 3.94	0.489 ns
By Years of Teaching Experience 4 years or below	2.61		2.76		2.71	
(n=21)	3.61		3.76		3.71	
5 to 10 years (n=19)	3.84	0.377 ns	4.04	0.116	3.68	0.049 ===
11 to 15 years (n=5)	4.11	U.5 / / IIS	4.07	ns	3.72	0.948 ns
16 or more (n=6)	3.99		4.45		3.48	

^{**}Significant level at 0.05

4. CONCLUSIONS

If the pedagogical knowledge, content knowledge, and technological knowledge are highly demonstrated by the business educators, therefore they have a high teaching performance.

The business educators demonstrate high quality teaching performance in delivering quality instruction. There is a significant difference in the teaching skills of the business educators when grouped according to discipline.

On pedagogical knowledge, the teaching skill is highly demonstrated by the Public Administration educators; on content knowledge, the Business Administration educators are the most knowledgeable; on technological knowledge, the skill is highly demonstrated by the educators from the Public Administration educators.

In reference to findings, both the Business Administration Faculty and the Public Administration Faculty with the

highest teaching skills will most probably best prepare the students for the jobs of the future. The future of the industry is best characterized by highly specialized competence requirements on technical knowledge and skills and on competence for the transfer of learning. There is a need to look into what the students learn and how the students learn predicts what the graduates can contribute and how they can contribute to the workplace. Education in institutions of higher learning today goes beyond the traditional norms via lectures, tests for learning and training. Hence, a new learning culture emerges and a new learning model such as an outcome-based education (OBE) learning approach is favored and adopted to reform and renew education policy worldwide [11]. Learning space requirements need to be addressed with the most recent learning materials.

The intervention plan focuses on capacity building for faculty in all the three teaching skills. The Accountancy Faculty are challenged with the fast development especially for the students in their Licensure Examinations which the coverage have changed drastically with six major revisions in the board exams. New taxation laws have been included in the Exams for which the old Accountancy curriculum did not. Accountancy faculty focus their teaching skills for students to pass the licensure. Multiple intelligences and varied types of assessment may not be significant to them. For all faculty, technological knowledge is to be given equal priority. Trainings in designing webpages IT experts or collaborate with the IT department prepare faculty for practical applications in business and public service. The students given better technological knowledge are able to solve and innovate by the use of technology for effective and more efficient operations in their future workplaces. Educational transformation processes to match current demands and future conditions can greatly increase relevance in teaching and learning [12]. Further, this study bridge the gap of the teaching skills of faculty that having a difficulty in coping up with the rapid technological advancement [13] by addressing any needs and concerns related to this technological trend [14].

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