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University Faculty Perceptions of Their Instructional Strategy

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Abstract

This study explored the faculty members' perception of their instructional strategy at the University of Social Sciences and Humanities – Vietnam National University of Ho Chi Minh City (USSH-VNUHCM) and the relationship that teaching resources, organizational culture and administrative support factors affect faculty instructional strategy were examined. A survey questionnaire measuring four factors of instructional strategy was distributed to 124 faculty members working full-time at the USSH-VNUHCM. The results indicate that most faculty members measured strongly towards their instructional strategy. In addition, the results also indicate that the different regression models had different explanation for faculty instructional strategy across different factors. Generally, factors of teaching resources, organizational culture and administrative support yielded significantly difference that affect faculty members' instructional strategy. The study's implications for university management are discussed.

Introduction

Instructional strategies view the ways and approaches to achieve the fundamental aims of teaching (Akdeniz, 2016). Instructional strategies can be understood as systematic guidance for learning, utilization of teaching tools and resources to help students to achieve highly in academic settings (Clarck & Starr, 1968; Moore, 2000).

Instructional strategies are mostly accustomed to apply learning theories in a useful way and to hold the learning outcomes. Instructional strategies can motivate students and help them focus attention, organize information for understanding and remembering and monitor and assess learning (Alberta Learning, 2002). The research of Akdeniz (2016) indicates that modern understandings regarding instructional strategies yield that instructional goals are heterogeneous and captious, hence, academic members are supposed to have a variety of approaches to the educational needs of students from different socio-cultural environments and to help students to have the best effective learning environment. Furthermore, Williams (2004) concurs that academic members should invest among diverse instructional strategies to help students achieve active learning experiences in cognitive, affective and kinetic fields. The research of Marzano (2003) and Lim (2002) find that effective academic members choose from a variety of instructional strategies in order for students to have successful learning experience cognitively and behaviorally.

Akdeniz (2016) also notes that instructional strategies had four categories based on the following

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criteria: traditional taxonomies, popular taxonomies, cross-disciplinary taxonomies, activity based taxonomies. Previous studies showed that instructional strategies include activities that help create the classroom environment for good-quality learning to occur. Instructional strategies are especially effective in the education program namely: cooperative learning, group discussion, independent study, portfolio development, journals and learning logs, issue-based inquiry, etc.

Marzano (2003) states that instructional strategies influence students' achievement and let faculty members diversify the instructional applications; target learning, instructional activities, instructional methods and techniques (Baker & Dwyer, 2005). In this study, we found the significant influence on faculty instructional strategy in Vietnamese higher education by teaching resources, organizational culture, and administrative support factors.

This study identifies and discusses factors at a Vietnamese university among faculty members' instructional strategy that contributes to students learning achievement and improves the quality training programs of the university. This study uses the framework of Chang, McKeaschie, & Lin (2010) as the key foundation and focuses on the instructional environment factors (including teaching resources, organizational culture and administrative support) that affect the perception of faculty members towards their instructional strategies. The main purpose of this study is to examine the university faculty perception of their instructional strategy. The following study objectives are: (1) To describe faculty members perception of instructional strategy at USSH-VNUHCM and (2) To examine the significant influence of the teaching resources, organizational culture, and administrative support factors on the faculty's instructional strategy. This study, thus, specifically addresses the following two questions: (1) What is the general perception of the faculty members towards the instructional strategy at USSH-VNUHCM? and (2) How is the faculty instructional strategy affected by the teaching resources, organizational culture, and administrative support factors?

Research methodology

1. Participants

The authors designed and implemented a survey and distributed to 140 faculty members who were drawn from faculty members working full-time in the University of Social Sciences and Humanities - one of six universities of Vietnam National University of Ho Chi Minh City. Out of the 140 faculty members, 124 questionnaires were returned for 88.6% return rate which exceeded the 30% response rate for analysis purpose (Dillman, 2000; Malaney, 2002). All data of respondents were self-reported information which was prevalently used in higher education research (Gonyea, 2005).

This study considered gender differences, approximate samples of women (60.5%) and men (39.5%) were collected to avoid unnecessary statistical bias over the results. For marital status, 50.8% of respondents were single, and 49.2% were married. Faculty members belong to different age groups, respondent age distribution was 44.4% below 30 years old, 22.6% from 31 to 35 years old and 16.1% from 36 to 40 years old. For length of employment in faculties' current position, 41.9% had from 1 to 5 years and 25.8% had from 5 to 10 years. For respondent educational attainment, 16.9% held bachelor's degrees, 72.6% had master's degrees, and 10.5% held doctoral degrees.

2. Variables

The dependent variable of this study was instructional strategy, constructed according to four questionnaire items measuring utilization of effective teaching methods, sustain students' attention, inspiring and maintaining students' motivation, and utilize various inquiring skills by a 5-point scale with responses ranging from 1 = very weak to 5 = very strong. Bandura (1997) agreed that one's self-perceived or believed capacities for a specific task are of substantial predictive validity for one's actual task performances. In this study, university faculty members self-reported on their instructional strategy.

Factor analysis and internal consistency analysis (Cronbach's α) were conducted to assess the validity and reliability of this constructed measurement for faculty members' instructional strategy. Table 2 shows that the factor loading values of the four items (0.83–0.91) were higher than the threshold value of 0.5 (Hair, Tatham, Anderson, & Black, 2009). A cumulative explanation from 76.39 percent of this study was greater than the threshold level of 60 percent and internal consistency analysis revealed a Cronbach's coefficient 0.895 higher than the threshold value of 0.6 (Hair, Tatham, Anderson, & Black, 2009) or 0.7 (Nunnally & Bernstein, 1994), indicating satisfactory reliability. Based on the validation of the construct reliability which concludes that the research construct of instructional strategy is reliable.

The independent variables of this study were

selected and organized into three blocks. The first block included teaching resources factor namely teaching support equipment, internet and computer, technology and software, teaching materials and classroom space. The second block consisted of organizational culture factor including colleague support, relationship with colleagues, feedback from peers, job autonomy and efficacy of department meetings. The third block indicated administrative support namely care about teaching effectiveness, requirement of high teaching quality, rewards quality teaching, involve teachers' idea, and concerned about teaching load. Table 1 shows the details of operational definitions, means, and standard deviations of the independent variables.

Table 1 Operational definitions, means and standard deviations of the independent variables

Block 1: Teaching resources

- Teaching support equipment: measured on a 5-point scale, where 1 = very dissatisfied to 5 = very satisfied (M = 3.21, S.D. = 0.83)
- Internet and computer: measured on the same scale as that for teaching support equipment (M = 2.82, S.D. = 0.98)
- Technology and software: measured on the same scale as that for teaching support equipment (M = 3.10, S.D. = 0.85)
- Teaching materials: measured on the same scale as that for teaching support equipment (M = 3.55, S.D. = 0.78)
- Classroom space: measured on the same scale as that for teaching support equipment (M = 3.02, S.D. = 1.02)

Block 2: Organizational culture

- Colleague support: measured on a 5-point scale, where 1 = very dissatisfied to 5 = very satisfied (M = 3.85, S.D. = 0.75)
- Relationship with colleagues: measured on the same scale as that for colleague support (M = 4.04, S.D. = 0.69)
- Feedback from peers: measured on the same scale as that for colleague support (M = 3.87, S.D. = 0.73)
- Job autonomy: measured on the same scale as that for colleague support (M = 4.20, S.D. = 0.72)
- Efficacy of department meetings: measured on the same scale as that for colleague support (M = 3.97, S.D. = 0.66)

Block 3: Administrative support

- Care about teaching effectiveness: measured on a 5-point scale, where 1 = very dissatisfied to 5 = very satisfied (M = 3.52, S.D. = 0.87)
- Require high teaching quality: measured on the same scale as that for care about teaching effectiveness (M = 3.79, S.D. = 0.76)
- Rewards quality teaching: measured on the same scale as that for care about teaching effectiveness (M = 3.31, S.D. = 0.85)
- Involve teachers' idea: measured on the same scale as that for care about teaching effectiveness (M = 3.43, S.D. = 0.82)
- Concerned about teaching load: measured on the same scale as that for care about teaching effectiveness (M = 3.46, S.D. = 0.87)

3. Data analysis

This study employed statistical methods of descriptive analyses and multiple regression analyses to analyze the data. Descriptive analyses were computed to understand the general level of faculty instructional strategy. A series of separate stepwise multiple regression analyses were conducted to analyze the affects of teaching resources, organizational culture, and administrative support factors on faculty members' instructional strategy.

Results and discussion

1. The level of faculty instructional strategy at USSH-VNUHCM

Table 2 presents the results of statistical means (M) and standard deviations (S.D.) as well as four aspect of faculty members' instructional strategy, the findings show that faculty members strongly agreed with inspiring and maintaining students' motivation (M = 4.17, S.D. = 0.84), followed by sustaining students' attention (M = 4.14, S.D. = 0.82) and utilizing various inquiring skills (M = 4.14, S.D. = 0.71). Students least agreed with utilize effective teaching methods (M = 4.10, S.D. = 0.63). Generally, the result indicates that most faculty members strongly measured their instructional strategy (M = 4.14, S.D. = 0.66).

Table 2 The results of factor analysis of the four items constructing faculty members' instructional strategy and Means (*M*) and standard deviations (*S.D.*)

Factors	Range of scores	Factor loadings	M	S.D.
Utilize effective teaching methods	1-5	0.83	4.10	0.63
Sustain students' attention		0.89	4.14	0.82
Inspiring and maintaining students' motivation		0.91	4.17	0.84
Utilize various inquiring skills		0.87	4.14	0.71
Total			**4.14**	**0.66**
Total variance explained (%)		76.39		
Cronbach's α		0.895		

The results of this study are supported by the research of Chang, Lin, & Song (2011) and Paneque & Barbetta (2006). These studies demonstrated that faculty members' score show least satisfied in instruction strategy. However, in contrast to the other research results, this study for instructional strategy measured in a high rank. The other named research used different methods, approaches, and instruments to measure instructional strategy for faculty members in higher education, thus, they have different results. There is still much room for university administrators to improve the level of instructional strategy efficacy of faculty members at USSH-VNUHCM.

2. Affects of teaching resources, organizational culture, and administrative support factors on faculty instructional strategy

In Table 3, Models 1 to 4 used stepwise regression analyses to clearly present the affects of variable combinations on the faculty members' instructional strategy at USSH-VNUHCM. These models present coefficients of β values, with $\beta > 0$ indicating a positive affect and $\beta < 0$ indicating a negative affect on the faculty members' instructional strategy. The different regression models had different explanation for faculty members' instructional strategy across different factors. Table 3 displays four models of multiple regression statistics which analyzed the affect across teaching resources, organizational culture, and administrative support factors on faculty members' instructional strategy. Models 1 through 3 present the separate affects of these factors on faculty members' instructional strategy, and Models 4 present the combined affects. Regression model proposed by this study explained 51.6 percent of faculty members' instructional strategy ($R^2 = .516$)

Model 1 shows that two items of teaching resources factor, namely teaching materials ($\beta = .349, p < .01$), and classroom space ($\beta = -.252, p < .05$) has a significant affect on faculty members' instructional strategy. The teaching materials were positively associated with faculty members' instructional strategy, on the contrary, classroom space exhibits a significant hindrance. The findings of this study are supported by the research of Akdeniz (2016) who notes that selecting and using appropriate teaching techniques reach the instructional goals. However, items of teaching resources factor did not significantly effect the faculty members' instructional strategy in Model 4. For this model, research of Meyers & Jones (1993) shows that electronic media can be successfully integrated with active-learning strategies in the classroom. This research indicated that the integration of reading materials into classroom activities, effective use of technology in the classroom, and the development of instructional expertise had affects on faculty members' instructional strategy. Thus, materials play an important role on faculty members'instructional strategy.

Model 2 indicates that two items of organizational culture has a significant affect on faculty members' instructional strategy. Job autonomy ($\beta = .343, p < .05$) has a significantly positive and efficacy of department meetings ($\beta = -.191, p < .01$) has negative affects on faculty members' instructional strategy. Few studies have attempted to examine the relationship between organizational culture and the implementation of major instructional innovation in higher education (including instructional strategy). The research of Marcoulides, Heck, & Papanastasiou (2005) suggests that organizational culture in educational institutions is related to faculty's values and beliefs, which affect the teaching process, and a supportive institutional environment can facilitate teachers' innovations (Hofman, Hofman, & Guldemond, 2002). Furthermore, Chang & Nadine (2014) yielded that organizational culture affect faculty's perceived need for innovation namely innovative approaches to instruction, responsiveness to instructional innovations and the perceived implementation level of educational innovations. These research assessed organizational culture from the dimensions of goal orientation, innovation orientation, participation in decision making, structured leadership, supportive leadership, shared vision, and collaboration among members. This study, thus, only has the relationship with colleagues to similar previous studies; unfortunately, this item shows no significant affect on faculty members' instructional strategy.

Three per five items of administrative support factor in the Model 3 has affects on faculty members' instructional strategy in USSH-VNUHCM. Items of care about teaching effectiveness ($\beta = .709, p < .001$) and rewards quality teaching ($\beta = .287, p < .05$) significantly benefited the instructional strategy of Vietnamese faculty members. However, requiring high teaching quality had a significant hindrance on instructional

Table 3 The results of regression analyses of variables that affect the faculty members' instructional strategy at USSH-VNUHCM

Factors	Model 1	Model 2	Model 3	Model 4
	Beta (β)			
Teaching resources				
Teaching support equipment	.246			.169
Internet and computer	.092			-.224
Technology and software	-.039			.142
Teaching materials	.349**			.195
Classroom space	-.252*			-.134
Organizational culture				
Colleague support		.191		.116
Relationship with colleagues		-.254		-.134
Feedback from peers		.330		.069
Job autonomy		.343*		.393***
Efficacy of department meetings		-.191**		-.236*
Administrative support				
Care about teaching effectiveness			.709***	.610***
Require high teaching quality			-.564***	-.713***
Rewards quality teaching			.287*	.145
Involve teachers' idea			-.243	-.138
Concerned whether teaching load			.097	.044
R^2	.191	.209	.349	.516

Note. * p < .05, ** p < .01, *** p < .001

strategy (β = -.564, p < .001). The findings of this study are supported by the research of Chang and Nadine (2014) who demonstrated that supportive leadership affects on faculty's instructional innovation (such as instructional strategy) in higher education. However, some studies also indicated that cooperative relationships between faculty and administrators are sometimes difficult to achieve. Campbell & Slaughter (1999) note that some tension between faculty and administrators has been accepted as an enduring part of academic life. This issue may impact faculty instructional strategy when administrators do not support or take care about teaching effectiveness of faculty members.

Finally, Models 1 through 3 presents the separate affects of teaching resources, organizational culture, and administrative support factors on faculty members' instructional strategy i, Models 4 presents the combined affects of all factors on this variable. In Model 4, two items of two factors of organizational culture, and administrative support has a significantly affect on the instructional strategy of Vietnamese faculty members. Job autonomy item of organizational culture factor (β = .393, p < .001) and care about teaching effectiveness (β = .610, p < .001). The item of administrative support factor is shown to be positively associated with faculty instructional strategy, on the contrary, efficacy of department meetings item (β = -.236, p < .05) and requiring high teaching quality (β = -.713, p < .001) shows a significant negative affect on instructional strategy.

Conclusion

Although this study obtained results that have both theoretical and pedagogical implications, it has some limitations. The primary limitation is that faculty members at USSH-VNUHCM were sampled in this study, and thus, the results and implications should be applied with caution to faculty members from different levels of higher education institutes or academic disciplines. Further research should collect faculty samples from various higher education levels and disciplines to accumulate abundant empirical information on instructional strategy of Vietnamese university faculty members.

Instructional strategy is one of the factors that measure teaching efficacy of faculty members in higher education settings. This study explored the faculty members' perception of their instructional strategy in Vietnamese higher education, and the relationship independence variables to faculty instructional strategy were examined. The results indicate that the most faculty members measured strongly towards their instructional strategy. However, there is still much room for university administrators and specialist to improve the level of instructional strategy of Vietnamese university faculty members in the process of designing training programs or seminars. In addition, the results also indicate that the different regression models had different explanation for faculty members' instructional strategy across different factors. Generally, factors of teaching resources, organizational culture and administrative support yielded significantly difference that have an affect on faculty members' instructional strategy. Policy makers and university administrators in Vietnamese universities should focus on improving items of factors rather than items of other factors in the process of constructing a universal intervention to enhance faculty instructional strategy at USSH-VNUHCM.

It is hoped that the barrier to faculty instructional strategy found in this study will be useful for university managers and policy makers to develop teaching environment, organizational culture, and administrative support activities. Therefore, a detailed understanding of faculty instructional strategy is the key to improving the quality of higher education in general and the training quality at USSH-VNUHCM in particular.

Declaration of conflicting interests

The author declared no potential conflict of interest with respect to the authorship and publication of this article.

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