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Research Article

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Teacher Creativity in University Students' Views: A Content Analysis

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INTRODUCTION

Education plays a pivotal role in today's world. It is clear that many factors including the learner's background, teacher's qualities and the learning environment affect the process of education. A teacher/instructor/lecturer has an important role in conveying and illustrating the material as well as in discovering the talented people and helping them to mature (1-6). It may be the case that one of the most important duties of teachers is to educate people in acquiring special talents and skills such as creativity. In 1959, Guilford defined creativity as a basic mental activity and ability which can be used for doing a new activity. Creativity is a basic ability and a necessary skill which is used for delineating the prospect of success and is the focal point in learning (7). Creativity is a person's ability in effectively responding to the continuous change in the current changing world of challenges. It is a powerful tool for solving the problems, improving critical thinking and comprehension skills, teaching divergent thinking and improving the learning quality (8-14). Creativity is kind of skill which is taught by creative teachers (8, 9, 16, 17). Creative teaching is a part and parcel of a teacher's personality and is manifested in his/her daily behavior (18). A teacher who works against the grain of tradition and includes in his/her classes such things as comprehensive experiences, open-ended questions, free discussions, freedom of expression and minimum class control has definitely practiced creativity (8). Creativity leads to better comprehension and fosters intellectual, emotional and social growth. For a teacher to be creative one needs a creative learning environment with the following characteristics: proposing alternative answers to the problems discussed in the class, supporting any effort for creating creativity and finally, using advanced class management strategies (9). Creative instruction includes different aspects such as interaction (learner-learner and learner-teacher), independence and autonomy, control and innovation (8). A creative teacher can make a difference in the process of creative and inquisitive learning, thus changing the learners' assumptions about effective learning (12). Creativity can also improve the autonomy, selfconfidence, personal growth and proficiency of the teachers themselves (9, 19). Although the significance of creative instruction has been highlighted by many studies, the prerequisites for such a form of instruction remain understudied, especially the role that a creative teacher plays in the process (15, 18, 20). Since doing a research about creative teachers and their characteristics necessitates a comprehensive understanding of the definition and characteristics of a creative teacher and also because of the lack of any previous comprehensive study on the topic, the present study aimed to carry out a qualitative content analysis of the nursing students' view about the criteria for a creative teacher. A qualitative content analysis allows the researchers to interpret the validity and reliability of the data in non-quantitative but scientific way (21). Alongside with other qualitative methods, the qualitative content analysis is used in nursing studies and instruction. This method includes an inductive generalization of the categories (22).

Methodology

This qualitative study was conducted in 2015 with the aim of explaining the criteria for a creative teacher from the perspective of university students of nursing. The study was done in Bandar Abbas Nursing-Midwifery faculty which is a major research and science center. A designed sampling was done. The inclusion criterion was being a student of nursery in the second to eighth semester – and willingness to participate in the study by filling in the consent form. Sampling continued until data saturation. Data saturation refers to the time when there is no new data and when the previous data is proven or repeated. Accordingly, 24 students participated in the study. The data was collected for five months (from October to February) by using a non-structured questionnaire (the interview opened with a question like, "In your view, who can be considered a creative teacher?" and the following questions were raised based on the responses of the interviewee and the aims of the study). Individual interviews (face-to-face) were conducted in a quiet place at the faculty of nursing – the interview time was agreed by the interviewee in advance. Each interview took between 60 to 90 minutes. Freedom of expression and convenience in expressing the comments were emphasis throughout the interviews.

In qualitative studies, data collection and data analysis are done at the same time. Accordingly, the data analysis in the present study was done after each interview until data saturation. This study used the conventional approach in its qualitative analysis of the content of the interviews. In conventional content analysis, the categories are directly taken from the textual data, thus enabling the researcher a better understanding of the topic. In such cases, the researchers avoids assumptions about the categories and allows the categories to come from the data itself. The most common result of conventional content analysis is conceptual and pattern building (21). In this study, the data analysis began by reading the textual data many times to get a general view and continued until acquiring a deep understanding of the data. Before studying the data, it was decided to pay attention both to the explicit and implicit content. Then, the analysis units, i.e. sentences with special meaning, were identified and the key concepts were assigned a semantic unit in each analytical unit. A code was attributed to each semantic unit and then the subcodes were defined and placed under the codes. After that, the codes with similar meaning were categorized which constituted the categories of the study. The main topics were obtained by comparing and integrating the similar categories (22). Certain ethical issues were considered, such as, the right to withdraw from the study in any stage and data and personal information confidentiality.

Member checking was used to increase internal validity. To do so, the interview was transcribed after each session and returned to the interviewee to be checked. Additionally, thick description was used to increase external validity; all stages of the study were explained in details. To increase the reliability of the study, the method of organizing the process of data registration was used in data collection and audit trail (21). In doing so, all stages of the study were explained in details.

Results

24 university students participated in this qualitative study with the following characteristics: age mean= 20.6 ± 1.2 ; 63% female; 43% dormitory residents; 56% local residents; the mean of total GPA= 16.1 ± 2.4 ; 61% interested in their field of study. The mean of duration of interviews was 75 minutes. 5 main and 15 subcategories were obtained. The main categories included: presentation of lessons, class management, assignments, teacher-learner interaction and teacher's characteristics – these are shown in Table (1).

1. Presentations of lessons

All students agreed that a creative teacher presents the lessons differently in comparison to other teachers. The subcategories of this category included: interesting presentation, significance of the lessons, relating the lesson to the daily life and presentation of lessons in the form of stories. For example, Student 7 noted that, "I once failed in one of the courses. The second time I took the course the teacher was different. In the first session, the teacher began the lesson by reciting a poem. The teacher said that 'my lips are dry like a person with a hypovolemia'. I really liked it. Really [...]".

Similarly, Student 19 said that, "The teacher told us a story about the cycle of renin-angiotensin. Interestingly enough he wanted to attract us to the story so much so that he began the story with 'Once upon a time' and then explained the cycle with a story. Even after two years, I still remember very well the story of the renin cycle".

Another student said, "When a teacher comes to the class and simply says that 'Look! Resuscitation is one of the important duties of a nurse' and then immediately begins the lesson I tell myself, of course I know resuscitation is important, everyone does. But have you seen a resuscitation yourself? Perhaps one of my classmates has lost her father because a failed resuscitation and would like to talk about it [...]" (Student 3). As seen in these examples as well as other interviews, the presentation of lessons and the teacher's teaching skills have a great influence on the students' view about who a creative teacher is.

2. Class management

Class management is one of the topics which was mentioned in many of the interviews. Most of the students referred to the change in the shape of the class and holding the classes in the open air by the creative teachers. One of the students said, "When we have a class with teacher [C], the chairs are shaped in circles of four or in two overlapping chains. Because groups work is required it is easier to interact, and well, everyone likes to be active in the class (Student 20).

Another point that was mentioned in the interviews was holding sessions in outside the faculty, for example, in the laboratory, nursing homes, research centers or even in the open air. In this regard, Student 3 said, "Once, teacher [C] decided to hold the class on the beach. It was both a class tour and a fruitful learning session". As seen in the interviews, the creative teachers try to move beyond traditional styles and methods by changing the class shape and location so that they can achieve their educational goals such as interactive and group learning.

3. Assignments

A large part of the interviews was about the fact that creative teachers assign creative and group tasks to the students. For example, Student 20 said, "The teacher asked a question about DIC and since we couldn't come up with a correct answer, the teacher decided to divided the class into two groups and asked us to use our creativity to present the process of DIC in the next session. Since creativity was highly emphasized by the teacher, we decided to make veins with little narrow pipes and while I was having lunch with my friends I had an idea about using the raisins as blood cells. Well, I won't forget this lesson ever; besides, the teacher welcomed the idea so much" (Student 3).

4. Teacher-learner interaction

Almost all students agreed that one aspect of being a creative teacher is to establish a good rapport with the students. In their view, such a relationship was based on encouraging the students to raise questions, using the students' skills and giving positive feedbacks to them.

In this regard, some of the interviewers said for example: "The teacher asked us to talk about our skills when we introduce ourselves. Everyone did so. One of my classmates said that she is a good cook. And the teacher said, all right, choose of your own recipes for a patient' meal. Well, with the teacher's help, she prepared something for nephrolithiasis patients and we had some too. Then the teacher talked about food diets. It was really good" (Student 4).

However, there was another student who believed that the teachers were not creative enough because they seem to be uninterested in the questions raised by the students and noted that, "When a classmate or I myself ask some questions, or pose a questions we have just came upon, the teacher either ignores it or protests about us asking questions. For example, once I asked, 'excuse me, why the denominator is 3 in that formula?' The teacher said, 'I was not born yesterday!!' I really didn't understand why the teacher said so'" (Student 14). Similarly, another student said, "A creative teacher must make a distinction between an active and a passive student. When I am always active in the class and respond to the questions and then the teacher does not give any feedbacks and

ignores them, do you think I am to blame? Can we call this teacher creative when my creativity and interest are being ignored" (Student 23). It is clear that the teacher-learner relation which is based on the spirit of raising questions plays a pivotal role in the students' view about creative teachers.

5. Teacher's characteristics

Needless to say the personal traits and characteristics of a teacher is highly important in the student's view about the teacher's creativity. This was also confirmed by the interviews. The subcategories of this category include: interest and enthusiasm, thinking aloud and active listening. "When teacher [C] teaches us something about esophageal disorder I am really interested although I feel exhausted because of the night shift I had, but the teacher's voice is so clear and excited, and the examples so interesting, that I am awakened and drawn back to the class" (Student 11). One of the students in the third semester said, "When the teacher says that like himself/herself we have to attend the classes [...] well this sense of obligation is just negative energy and shows that the teacher is not interested in teaching at II. It is terrible" (Student 22). Most students mentioned a similar thing, that is, "The teachers do not really listen to us. When we are talking they are looking at their laptops or writing something, it shows that they do not care about us". Or "On many occasions, the teacher says, 'well, I forgot what you asked! What did you ask?" (Student 20). The interviews show that the teacher is considered less creative when he/she does not pay attention to the students or does not listen (inadvertently or otherwise) to their comments.

An important point which was inferred from the students' views about creative teachers was the importance of the skill of thinking aloud by the teachers. In this regard, one of the students said, "When the teacher explains step by step why for example an ESRD patient has hyperkalemia and talks about the details, well, of course I learn. But of the mechanisms are not explained, nor the causes, well, we will just memorize them, but won't learn the causes" (Student 15).

Table 1. Topics and categories for being a creative teacher in students' view

Main topic		Categories
Presentation of Lesson	1.	Interesting presentation
	2.	Significance of the study
	3.	Relating the lesson to the daily life
	4.	Use of stories in presenting the lesson
Class management	1.	Changing class shape
	2.	Holding the class sessions outside the faculty
Assignments	1.	Creative tasks
	2.	Group tasks
Teacher-learner interaction	1.	Encouraging the spirit of raising questions
	2.	Using the students' skills
	3.	Giving positive feedbacks to the students
Teacher's characteristics	1.	Activeness and enthusiasm
	2.	Interest and eagerness

3.	Thinking aloud
4.	Active listening

Discussion

This was a qualitative study with a content analysis approach. The study included five main categories: presentation of lesson (4 subcategories), class management (2 subcategories), assignments (2 subcategories), teacher-learner interaction (3 subcategories) and teacher's characteristics (4 subcategories).

In a qualitative study by Rankin & Brown (2016) about nursing and midwifery students' view with regard to being a creative teacher, the students mentioned methods like using games, stories, plays, poems and music in the class. Moreover, the results of this study showed that to make the class lively, using techniques which incite energy and motivation and emphasize social learning can be highly effective (20). Similarly, in the present study, the students mentioned the use of stories and group activities in class management. The similarities between the study by Rankin & Brown and the present study have increased because of the similarity in the sample of the two studies (nursing and midwifery students).

Nazeri & Ruhizan (2015) have found out that the teacher's flexibility allows changes in educational syllabi and programs. Moreover, the study concludes that the teacher's personal characteristics are effective in his/her creativity (23). These findings are in line with the present study's findings about the fact that creative teachers tend more often than not to change the shape and location of the class.

Redko *et al.* (2015) have done a research about the role of creative learning in improving proficiency skills and have concluded that certain factors such as motivation, communication and divergent thinking are important in this regard (14). Comparing the findings of their study with the findings of the present study shows that there is a strong similarity between the two. In the above study, divergent thinking emphasizes the expansion of thinking abilities and choosing seemingly abnormal and minor options. Similarly, it was found out that a creative teacher with the qualities of thinking aloud and assigning creative tasks encourage the students to search for and find minor options.

Demir & Sahin (2014) who have studied teacher creativity have found out that using open-ended questions, enthusiasm in teaching and creative approaches are some of the important factors which should be taken into account by the teachers (24). The findings of this study is in line with the present study. In the present study, it was found out that a creative teacher encourages the students to ask questions. In fact, raising open-ended questions is intended to encourage the students to continue asking questions. The findings of the above the study is in line with the findings of the present study in this aspect too.

In a systematic survey study by Davies *et al.* (2013) it was found out that creative learning environments are completely flexible in their use of time and space. Moreover, it was found out that creative learning environments emphasize extensive tasks, teacher-learner relation based on mutual respect and game-centered teaching (19). All of these findings are in line with the findings in the present study. Such a similarity indicate the importance of these factors in the issue of creativity.

Rezaei et al. (2013) have carried out a study about the role of creative teaching in teenage education and have found out that creative teaching plays a significant role in improving critical thinking, cognitive styles and general health (25). The above study foregrounds the significance of the present study as well. It also emphasizes the role of creative teachers in education.

In a study by Tinnon, the researchers the creative method in teaching pharmacology. The feedbacks by the students were satisfactory and meaningful and continuous learning was improved (26). Similarly, the present study, especially in the interviews, showed that the students' experience of creative education emphasized meaningful and continuous learning.

The study by Cachia *et al.* (2010) which was aimed at defining creative teaching and learning showed that one of the ways to improve creativity in teaching and learning was the necessity of taking certain creative measures by the teachers themselves. The researchers pointed out that a creative teacher can teach creativity to the learners too and prepare creative people for the society (15). The above study proves the significance of the present study in its emphasis on the role of creative teachers in achieving educational goals.

Conclusion

Given the pivotal role that a teacher plays in education on one hand, and the importance of creative teaching on the other, it seems that creative teachers can have a very important role in achieving educational goals including meaningful learning, critical thinking and problem-solving skills. A creative teacher teaches differently in comparison to other teachers and makes use of the time and space in the best possible way to establish effective relationships with the learners. Moreover, the learners respond more positively to creative teachers and show interest and enthusiasm to attend creative classes. Providing the teachers with sufficient information about the importance of creative teaching and training them to become creative teachers are among the most needed things in education.

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