Scholars Journal of Arts, Humanities and Social Sciences **ISSN 2347-5374 (Online)**
Sch. J. Arts Humanit. Soc. Sci. 2014; 2(2C):347-351 **ISSN 2347-9493 (Print)**

(An International Publisher for Academic and Scientific Resources) DOI: 10.36347/sjahss.2014.v02i02.035

Study of examination method reform on *Histology and embryology* course in Chinese private vocational college

Wei Li*, Chunhong Cui, He Jiang, Qiaozhen Wang, Hui Cheng, Weiwei Zhang
Shandong Wanjie medical college, Zibo, 255213, China

***Corresponding Author:**
Wei Li
Email: wj_jclw@126.com

Abstract: This study explores the actual applications of comprehensive whole journey checking methods in Histoembryology of specialized nursing students in our college. The nursing students of 2012 Level and 2013 Level were selected in our colleges as the research object. In these two periods of nursing specialized students, the selected classes with no obvious grade differences and completely consistent teaching contents, teaching methods and teaching processes in Histoembryology as the contrast group and experimental group of examination reform. After applying the whole journey checking method for examination reform, it compares the examination scores of contrast groups and experimental groups of 2012 Level and 2013 Level, their satisfactory degrees on examination methods and etc. The satisfactory degree and good rate of experimental group students of 2012 Level is obviously higher than that of contrast group, the qualified rate of experimental group is nearly the same with that of contrast group; the satisfactory degree, qualified rate and good rate of experimental students of 2013 Level are all significantly higher than those of contrast group. After the application of comprehensive whole journey checking method of reform, the initiatives of nursing students in learning Histoembryology improve, and their learning interests, grades and abilities and etc all enhance to some extent, which is beneficial to the future learning and work of nursing specialized students.
Keywords: Examination methods: Reform; Comprehensiveness; Whole journey checking; Histoembryology; Nursing specialty

INTRODUCTION

The source qualities of junior college students recruited by private colleges are ragged, some parts of students have weak basis, bad disciplines in the learning process, give up when they cannot understand and anticipate students to tutor before examinations. Histoembryology includes two subjects of Histology and Embryology, which is an important medical basic course and is the foundation for nursing, clinical and other major students to learn physiocology, pathology, biochemistry, obstetrics and gynecology and other subsequent subjects. As one of medical courses that medical students should firstly touch upon entering the medical college, Histoembryology belongs to microcosmic morphology, which is more abstract compared to human anatomy. In learning, microscope and other technologies are aided for eyes cannot be used for the direct observation, and the interactive transition of plane graphs and stereo structure also exist , students usually believe that knowledge points are usually numerous and scattering, contents are drying, abstract and difficult to master and the phenomenon that the failing rates of ending examinations often appear.

The current college examination system is that students can pass the exam only by scoring over 60. Some students with stronger memories study randomly, recite text contents rashly before the exam, and get passed. It has caused that students are not serious in ordinary classes in recent years, requiring teachers to tutor before exams. Tricks, guesses and cheats have become more and more common, leading that grades cannot correctly reflect the abilities of actually mastering knowledge, which frustrates the learning initiatives of students to some extent, inhibits their learning interests and makes students to produce speculation psychologies easily[1]. In addition, the current examination methods are single and rigid, usually the method that one ending closed book examination determines the grade makes students spend numerous thoughts in written examination but ignore the cultivation of abilities in other aspects. Their exam-oriented abilities improve continually, but their expressing ability and practical ability are usually not emphasized enough. Examination is the important link of education work, and any education cannot exist without examinations, which includes five great function of assessment, testing, diagnose, feedback and stimulation [2]. The current examination system cannot

output qualified practical talents for the society. Therefore, we try to introduce comprehensive whole journey checking methods to explore examination methods of Histoembryology fitting the nursing specialty in our college so as to make examinations to develop five great function of assessment, testing, diagnose, feedback and stimulation better.

OBJECTS AND METHODS

Comprehensive whole journey checking patter stems from America, which is the multi-form checking penetrating through the whole process of learning with complete and rich examination contents, comprehensively checks the knowledge mastering situation and the comprehensive checking of comprehensive abilities, evaluates the learning situation of students objectively and justly and guides students to learn autonomously and helps teachers to find problems and revise the teaching in time. Comprehensive whole journey checking patterns mainly include three aspects of examination forms, examination contents and grade evaluation means [3].

Research objects

It takes nursing specialty students of 2012 Level and 2013Level as the research object. In 2012 Level nursing specialty of our college, there are totally 7 nature classes, which takes three natural classes of Class 3, Class 4 and Class 7 as the contrast group of examination method reforms, and three natural classes of Class 2, Class 5 and Class 6 as the experimental group of examination method reform; there are all two arts classes and a science class in three natural classes of contrast group and experimental group, two groups of students have no obvious differences in entrance total scores and the teaching contents, teaching methods and teaching processes of two groups are completely the same. In 2013 Level nursing specialty in our college, there are totally 12 natural classes, which takes three natural classes of Class 5, Class 6 and Class 9 as the contrast group of examination method reforms, and three natural classes of Class 3, Class 7 and Class 8 as the experimental group of examination method reform ; there are all two arts classes and a science class in three natural classes of contrast group and experimental group, two groups of students have no obvious differences in entrance total scores and the teaching contents, teaching methods and teaching processes of two groups are completely the same.

Research methods

It uses comprehensive whole journey checking methods to reform 2012 Level and 2013 Level nursing specialty experimental group class Histoembryology examination methods and comprehensively analyzes its scores and questionnaire situation.

Teaching reform backgrounds

Our College activates “three teaching reforms” in 2011, Histoembryology is one of first teaching reform courses. Our teaching and research section makes reforms on teaching contents and teaching methods firstly for 2011 Level nursing specialty students in accordance with requirements, and further deepens teaching contents and teaching methods reforms for 2012 Level and 2013 Level students and starts exploring examination method reforms.

Reforms of 2012 Level nursing specialty students examination methods include:

1. Reforms on examination contents: it lowers the difficulties of examination papers properly, emphasizes the checking of the basic and overall knowledge ; Ending examination papers of students of two groups of experimental group and contrast group are the same.

2. Reforms on examination forms and grade evaluation methods: the compositions of student grades in experimental group are: ordinary grades(accounting for 20%, attendance grade accounts for 10%, class questioning grade accounts for 10%)+ending examination grades (test paper score accounts for 80%); the implementation method of questioning grades is to ask questions to a student in every class and add and subtract points on the overall class for the understanding applications of knowledge and expression abilities. The compositions of student grades in contrast group are: ordinary grades (accounting for 20%) and ending examination grades (test paper score accounts for 80%).

Reforms of 2013 Level nursing specialty students examination methods include :

1. Reforms on examination contents: It designs ending examination test papers in accordance with specific learning situations of arts and science classes, checks basic contents emphatically on students of arts class; the graduation test papers of two groups of arts classes of experimental group and contrast group are the same, the graduation test papers of science classes are the same.

2. Reforms on examination forms and grade evaluation methods: the compositions of student grades in experimental group are: ordinary grades(accounting for 40%, attendance grade accounts for 10%, class questioning grade accounts for 10%, open-style extra class accounts for 20%)+ending examination grades (test paper score accounts for 60%); the implementation method of open-style extra class homework is to set some ranges of homework contents for experimental class students, allow students to complete homework with means of discussion, references, Internet searching and etc and give certain grades after the evaluation on homework. The compositions of student grades in contrast group are: ordinary grades (accounting for

40%, attendance grade accounts for 10%, and class questioning grade accounts for 20%) +ending examination grades (test paper score accounts for 60%).

After the end of graduation exams of Histoembryology course of two Level students, it takes Histoembryology Course Examination Method Assessment Form as the investigation tool for anonymous comments. Investigation contents include the satisfactory degree on course examination methods and effects on initiative learning and learning interest aspects. 2012 Level contrast group delivers 151 pieces of questionnaires and recycles 146 pieces; experimental group delivers 153 pieces of questionnaires and recycles 149 pieces. 2013 Level contrast group delivers 156 pieces of questionnaires and recycles 150 pieces; experimental group delivers 161 pieces of questionnaires and recycles 157 pieces. All of them are effective questionnaires.

Statistics method

The paper analyzes the counting data with Chi-Square tester V1.61, mean data is analyzed with concise statistics dealer 2.0, $P < 0.05$, the result equips with statistical meanings.

RESULTS

The results analyses of 2012 level reform are shown in table 1-6.

Table-1: The comparison of two groups of students in grades 2012 (%)

group	number of people	pass	fail
control group	151	106（69.5%）	45(30.5%)
experimental group	153	109（69.9%）	44（30.1%）

Note：$X^2=0.04$, $P > 0.05$

Table-2: The comparison of two groups students in good rate (%)

group	number of people	good	not good
control group	151	21（13.9%）	130（86.1%）
experimental group	153	35（22.9%）	118（77.1%）

Note：$X^2=4.07$, $0.01 < P < 0.05$

Table-3: The satisfaction of two groups students on examination method (%)

group	Number of people	satisfied	basic satisfied	dissatisfied
control group	146	26（17.8%）	62（42.5%）	58（39.7%）
experimental group	149	32（21.5%）	83（55.7%）	34（22.8%）

Note：$X^2=9.82$, $P < 0.01$

Table-4: Two groups of students' interest in self evaluation (%)

group	Number of people	high interest	haveinterest in	no interest
control group	146	21（14.4%）	69（47.3%）	56（38.4%）
experimental group	149	35（23.5%）	81（54.4%）	33（22.1%）

Note：$X^2=9.20$, $P < 0.01$

Table-5: Two groups of students' learning potential (%)

group	number of people	high play	basic play	not to play
control group	146	23（15.8%）	63（43.2%）	60（41.0%）
experimental group	149	31（20.8%）	65（43.6%）	53（35.6%）

Note：$X^2=0.95$, $P > 0.05$

Table-6 : The learning active of two groups of students (%)

group	number of people	Often actively	Occasionally active	Never actively
control group	146	20（13.7%）	65（44.5%）	61（41.8%）
experimentalgroup	149	31（20.8%）	87（58.4%）	31（20.8%）

Note：$X^2=15.12$, $P < 0.01$

The results analyses of 2013 level reform are shown in table 7-12.

Table-7: The comparison of two groups of students in grades 2012 (%)

group	number of people	pass	fail
control group	156	110（70.5%）	46（29.5%）
experimental group	161	135（83.8%）	26（16.2%）

Note：X^2=8.03, P < 0.01

Table-8: The comparison of two groups students in good rate (%)

group	number of people	good	not good
control group	156	29（18.6%）	127（83.4%）
experimental group	161	45（28.0%）	116（72.0%）

Note：X^2=3.88, 0.01 < P < 0.05

Table-9: The satisfaction of two groups students on examination method (%)

group	Number of people	satisfied	basic satisfied	dissatisfied
control group	150	36(24.0%)	68(45.3%)	46(30.7%)
experimental group	157	64(40.8%)	71(45.2%)	22(14.0%)

Note：X^2=12.34, P < 0.01

Table-10: two groups of students' interest in self evaluation (%)

group	Number of people	high interest	haveinterest in	no interest
control group	150	29(19.3%)	81(54.0%)	40(26.7%)
experimental group	157	46(29.3%)	85(54.1%)	26(16.6%)

Note：X^2=4.64, 0.01 < P < 0.05

Table-11: two groups of students' learning potential (%)

group	number of people	high play	basic play	not to play
control group	150	21(14.0%)	65(43.3%)	64(42.7%)
experimental group	157	43(27.4%)	82(52.2%)	32(20.4%)

Note：X^2=17.72, P < 0.01

Table-12: The learning active of two groups of students (%)

group	number of people	Often actively	Occasionally active	Never actively
control group	150	27(18.0%)	97(64.7%)	26 (17.3%)
experimentalgroup	157	46(29.3%)	96(61.1%)	15 (9.6%)

Note：X^2=4.01, 0.01 < P < 0.05

DISCUSSIONS

The phenomenon of "Emphasize theories more than qualifications, knowledge more than abilities and results more than processes" widely exists in higher vocational and professional college education [4]. For the long term, the examination method with the center of ending closed-book examinations seriously deviates the talent cultivation targets in higher vocational and professional colleges, methods and contents of examinations are still left behind the old education testing stage, student ability examinations are replaced by theoretical knowledge tests. In the evaluation after examinations, subjective experimental judgments are still dominant, which lacks scientific guidance[5-6], leads the increasing oppression of examinations, influences the cultivation of student comprehensive qualifications in a large sense [7], and constrains the development of examination functions and the deepening of college teaching reforms. Higher vocational and professional education is the education on qualifications and professional abilities, our college specifically puts forward that the cultivation target of specialty education is "applied talents" cultivation. In the reform of comprehensive whole journey examination methods of Histoembryology on nursing specialty students of 2012 and 2013 Level in our college, we have explored and practiced from three aspects of examination contents, examination forms and grade evaluation comment means and have found by practice that:

The ordinary grades of students in contrast group of 2012 Level are set as attendance grades. Numerous students "live in the Cao camp but with another heart in the Han camp", they play games in class, chat online and even see films, for they can obtain the attendance grades only by presenting in class. These students not only give up learning by themselves, but also influence the learning enthusiasms of surrounding classmates, which is disadvantageous for the learning atmosphere of the total collective scope. Numerous students have become the passive role in the education process and cultivated the bad habits of wasting brains, thinking passively and depending on teachers seriously [8]. For students in experimental group of 2012 Level, ordinary scores are added into questioning scores, questions are raised in every class, every classmate may be questioned, and results of answers can cause influences on grades of classmates of the whole class. In this case, most students will review and consolidate what they have learned after class. But this method of single questioning scoring to enhance the whole journey checking has little influences on initiative learning, most students worry lagging their classes so as to review passively, and they initiatives are so terrible that their learning potentials cannot be developed very well. How to improve the abilities of thinking independently and learning autonomously is still the problem remaining exploring.

As a kind of testing means, examination should connect talent cultivation activities at school with the society. With the learning in colleges, students should not only acquire knowledge, but also improve their abilities. In the examination reform, the open-ended extra-class work is further introduced in the ordinary grades of students in contrast group of 2013 Level and students are allowed to complete their homework by referencing data, literature searching, communication among classmates and intercourses among course teachers and etc. Students consolidate and expand knowledge by completing homework, greatly improve their learning interests and enthusiasms by expanding knowledge, turn the passive learning to initiative learning in Histoembryology and improve their autonomous learning. In addition, in the process of completing homework, it also enhances the learning intercourse among students and between students and teachers, improves their abilities of analyzing and solving problems and enables them to acquire certain scientific research abilities. Scientific research ability is the foundation of the determination of subject progresses[9], and the acquisition of these abilities are very beneficial to the future professional learning, upgrading and even postgraduate examinations for students in nursing specialty.

After applying the reform with comprehensive whole journey checking method, the examination method of nursing specialty Histoembryology changes single assessments to procedural checking and ability tests and ranges from the unary examination to multiple examinations, and the satisfactory degree of students in examination methods improve greatly. The reform of examination methods still involve deficiencies, and the checking content composition will be further explored in the future, such as adding experimental checks and etc so as to develop the inspection and stimulation functions of examinations further.

Acknowledgments

This work was supported by grants from the program of Shandong Vocational and adult education (2011XJG1119).

REFERENCES

1. Man li, Gao Lihua; Influence of examination reform on learning activeness of high vocational school nursing students . Chinese Nursing Research, 2009; 23 (286): 1304-1305.
2. Luo Qiong; Reform of higher vocational nursing specialty nursing course examination method . Chinese Nursing Research, 2005; 19 (146): 1119-1120.
3. Su Yanping, Gao Huiying, Wei Lihua et al.; Study of comprehensive examination in Histology and Embryology course . Journal of Shanxi Medical University, 2008;10 (5): 517-519.
4. Xue Songhai, Li Shuwen; Exploration and practice of examination reform based on capability and quality . Education research, 2009; (211): 190-193
5. Zhang Jianchao, De Xuehong; Study of humanistic quality course examination reform. Journal of Inner Mongolia Agricultural University, 2011;13 (57): 190-193.
6. Lu TY, Wang PL, Wang JQ, et al;Reform and creation of the courses of health for nursing speciality during high grade education. Journal of Nurses Training, 2004; 19(11):989-992.
7. Zhou YQ; Imagination on Reform of "Health evaluation" course of nursingspecialty. Chinese Nursing Research, 2007; 21 (11): 2899-2902.
8. Hong Binbin, Li Fanglan, Wang Chunsheng, et al.; The correlation analysis between the learning behavior and learning achievement on the basic medical knowledge of nursing students. Chinese General Nurseing, 2008; 6 (111): 1673-1675.
9. Li Hong; Evaluation of teaching effect in nursing undergraduate. Journal of Modern Nursing, 2011;17 (5): 581-582.