

# Research on Career Development and Career Counseling Programs for Normal Students Based on the “ATR Model”

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**Abstract:** This study uses the “ATR Three-Stage Progressive Cyclic Career Counseling Model” to support the early career development of new teachers, aiming at the challenges faced by new teachers under China's "Double Reduction" policy. Based on the theories of Person-Job matching and Career Development, this paper analyzes the career counseling attitude of 347 new teachers through questionnaires. It is found that although new teachers actively seek career counseling, their practice is limited. The study recommends the development of career counseling programs, strengthening cooperation between educational institutions and industry, encouraging continuing professional development, establishing assessment feedback mechanisms, and raising awareness of career counseling for new teachers to promote their career development.

**Keywords:** ATR Model; Normal University Students; Career Development; Career Counseling

## 1 Introduction

The "Double Reduction" policy, implemented in China from the third quarter of 2021, has led to a significant cooling of the education job market, particularly affecting the demand for college graduates. Designed to alleviate student workloads and prevent the over-commercialization of education, the policy has resulted in a substantial decline in employment rates for teacher trainees. The annual discrepancy between 701,600 teacher trainees and merely 248,500 available teaching positions, coupled with the fact that 20% of teachers originate from non-traditional programs, highlights a significant gap in training. This situation has increased the demand for career counseling and innovation in the teaching profession to address the challenges posed by the policy. Yao (2022) further suggests that the impact of shadow education on the quality of compulsory education exacerbates these issues.

Against this backdrop, this study is anchored in Person-Job matching and Career Development theories. The Person-Job matching theory, pivotal to career development (Yang, 2020), underscores the importance of aligning individuals' stable traits, such as abilities, interests, personality, and values, with suitable occupational environments to ensure optimal role placement. This alignment is crucial for enhancing human resource utilization and task performance (Fan, 2022). LV Sha's (2023) career development theory describes the dynamic, long-term formation of professionalism, influenced by various factors, and is instrumental in helping pre-service teachers develop career planning awareness and make career choices that align with their personal attributes.

Drawing on these theoretical frameworks, this study aims to support the early career development of college students and new teacher graduates, addressing the challenges they face in job searches. The dynamic job market and the emergence of new industries have led to an increased need for career counseling among new teachers. By examining pre-service teachers' attitudes toward career consulting, personal expectations, professional skills, industry demands, and basic teacher characteristics, this research

endeavors to enhance employment rates and quality for future educators. Through the "ATR Model," this study seeks to provide a comprehensive career development and counseling program that meets the specific needs of normal students, ultimately contributing to their successful transition into the teaching profession.

## 2 “ATR” Three-Stage Progressive Cyclic Career Counseling Model

### 2.1 Background Information on the “ATR Model”

The "ATR Model", officially known as the "ATR Three-Stage Progressive Cyclic Career Counseling Model" was designed by Li Hongguang, the founder and CEO of Wanhang Teacher Talent Network in 2017. This model is tailored to assist professionals in the education sector, particularly teacher college graduates, with their career planning and development. Established in 2002, Wanhang Teacher Talent Network is an educational-focused internet recruitment platform that offers employment and growth opportunities for teachers. The platform is dedicated to matching teachers with suitable job positions and supporting their professional advancement within the education field.

The object of this study is the pre-entry teacher graduates majoring in normal education. Combined with the characteristics of the consultation object and the need to help them realize their career choice in the later stage, this study uses the three-stage progressive circular career counseling model of ATR (Assessment, Training, Review) (Li, 2017). The “ATR model”, designed for normal major graduates with clear career goals, begins with ability assessment and progresses to teaching skill training. If targets are met, effects are reviewed via return visits; otherwise, the cycle repeats.

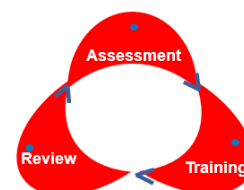


Figure2.1: ATR Three-Stage Progressive Cyclic Career Counseling Model

## 2.2 Analysis and Discussion of the “ATR Three-Stage Progressive Cyclic Career Counseling Model”

This study targets graduates who are on the verge of entering the teaching profession. Within the established career counseling model, clients will progress through three distinct stages: Assessment, Training, and Review. Should the trainee wish to complete the counseling process, they will undergo these sequential

phases.

1. Assessment stage includes target clarification and Holland test; 2. Training education teaching ability training phase is made up of "Pre-employment Training and On-the Job Internship", including pre-employment training, employment guidance, teaching, school trainee and exercises trainee after Training; 3. Review stage is designed to investigate the visitors of career counseling goals are reached.

Figure 2.2 describes the concrete career consultants and the main task of the process:

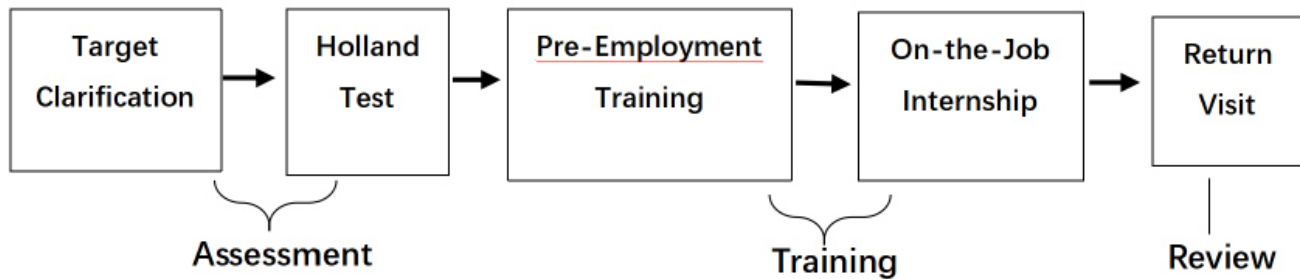


Figure2.2: Counseling Process of the “ATR” Career Counseling Model

Step1. Target Clarification: Tailoring personal and group counseling to education industry specifics, to help pre-service teachers clarify career goals. Focusing on comprehensive abilities, we ensure their readiness for future educational roles. We guide students to define specific roles like elementary, middle, or high school teachers, or vocational instructors. This involves fostering self-assessment, exploring interests, strengths, weaknesses, and values, and understanding their personality, learning styles, and career positioning to make informed career choices.

Step 2. Holland Test: The Holland Test (Holland, Cited in Lin, C. H., 2020) assesses abilities, interests, and related factors to clarify career choices further. Based on an initial understanding of the career goals set by normal students, the Holland Test is used to help normal students who are about to enter the teaching profession, that is, visitors, to clarify their career tendencies and interests, thereby better planning their career development. In this phase, visitors need to first clarify the purpose of the assessment, mainly considering aspects such as career tendencies, hobbies, career confusion, and career development planning. Secondly, visitors need to understand the content of the assessment, that is, the six aspects included in the Holland Test. Then, based on the assessment content, evaluate their own characteristics in personality, interests, abilities, etc., and record them. Of course, this can also be done through self-reflection, communication with friends and relatives, and referring to the evaluations of others. Finally, visitors determine the matching degree of their career choices with their personality, interests, and abilities.

Step 3. Pre- Employment Training: This phase encompasses career guidance, curriculum development, in-school practice, and post-internship training. It focuses on:

1. Exploring the job market through platforms like Wanhang Teacher Talent Network to understand teaching profession demands and job opportunities in education.
2. Enhancing decision-making skills through teaching observations and experience sharing to make informed career

choices.

3. Creating personalized career plans based on interests, strengths, and market needs, including skill acquisition, certification, and practical experience.

4. Developing interpersonal skills through team building and group discussions to manage future workplace relationships effectively.

Step4. Evolution of the Internship Process: Transitioning from "Shadowing and On-the-Job Internships" to a "Pre-employment Training and On-the-Job Internship" Model: Training of job-hunting strategies and skills that can successfully enter the teaching profession.

In this study, through "Shadowing and On-the-Job Internships" to "Pre-employment Training and On-the-Job Internship" adjustment, for visitors to help improve job search strategies and skills, this is also one of the most important link in teachers' career counseling, of course, this also is the important content of this study.

(1)Fostering School-Enterprise Partnerships: Implementing the "Shadowing Internship + On-the-Job Internship" Model

Shadowing internships (Yoo, S. 2012) focus on learning by following a job position, where students assist and learn under the guidance of professionals to complete tasks. On-the-job internships are practical educational activities conducted at schools. They require students to have the initial capability to work independently on their practice positions, fulfilling all duties of their internship roles autonomously, which is quite challenging. The purpose of this internship is to exercise students' abilities, enhance their professional practice skills, and prepare them for job hunting after graduation.

(2) Collaboration between Schools and Enterprises for the Implementation of a "Pre-Employment Training + On-the-Job Internship" Model

In the "Shadowing + On-the-Job Internship" process, students lacking clear role understanding and independent teaching skills

exhibit performance disparities, sometimes starting with lower salaries. To tackle this, a "Pre-Employment Training + On-the-Job Internship" model has been adopted, an enhanced version of the previous approach.

This new model follows a "2.5 + 0.5 + 1" structure: 2.5 years of academic study, 0.5 year of intensive teacher skill training on campus, and a 1-year workplace internship. The additional training

focuses on teaching cognition, lesson planning, implementation, evaluation, and class management, ensuring students are well-versed in educational practices, can utilize teaching resources effectively, and are equipped for a full year of teaching before stepping into their roles as on-the-job teachers.

Implementation process:

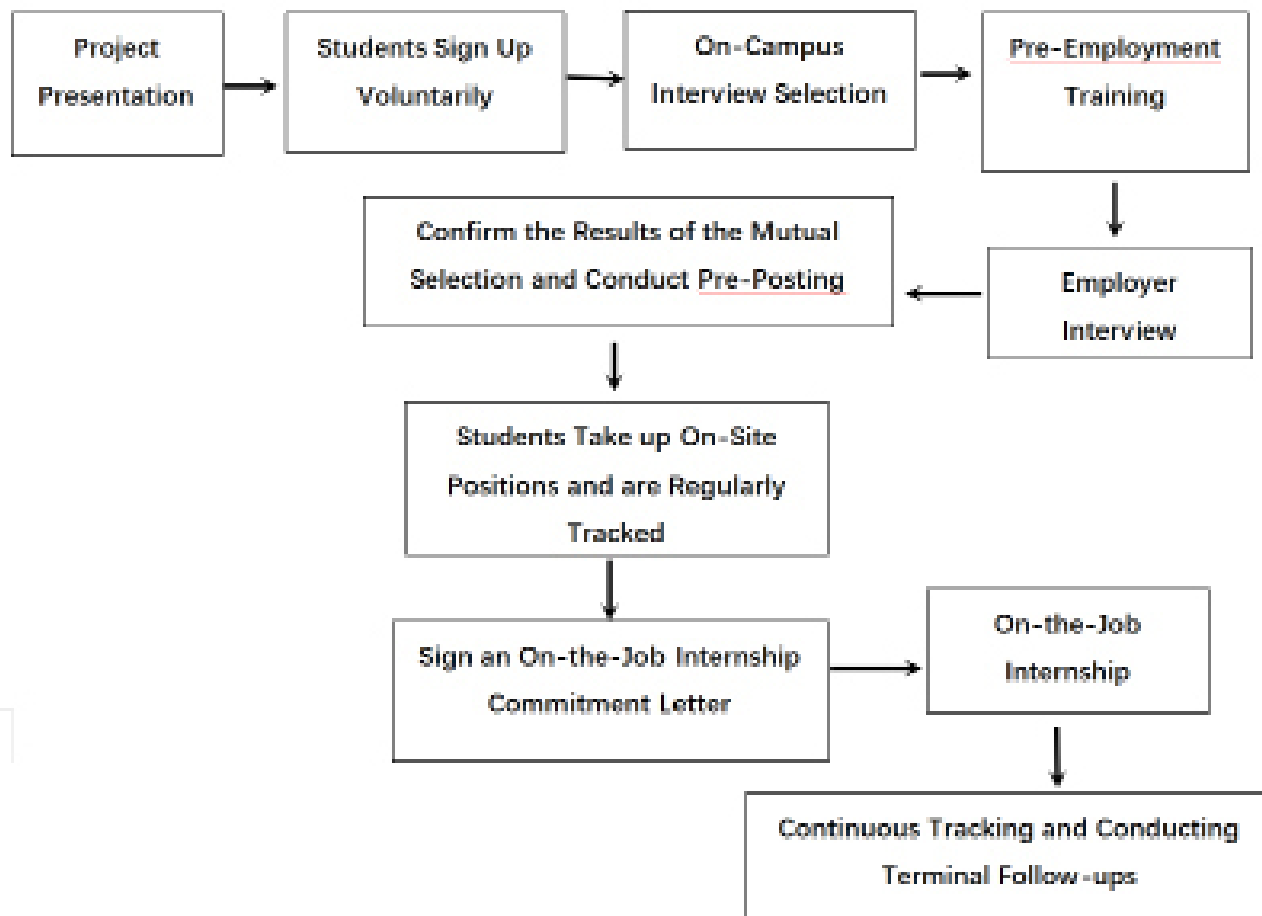


Figure2.3 Implementation Process for Pre-employment Training and On-the-Job Internship

Step5. Return Visit: Through the return visit to clarify the consultation results of the client, if the consultation goal is achieved, the career consultation is completed, if the expected goal is not reached, the cycle will be repeated according to the model, but when the cycle is repeated, the content of the training stage will

be retrained according to the content of the return visit.

In order to grasp the situation of all the visitors who participated in the career counseling, we conducted a return visit to all the samples through different forms, and the return visit was conducted in accordance with the following procedures.

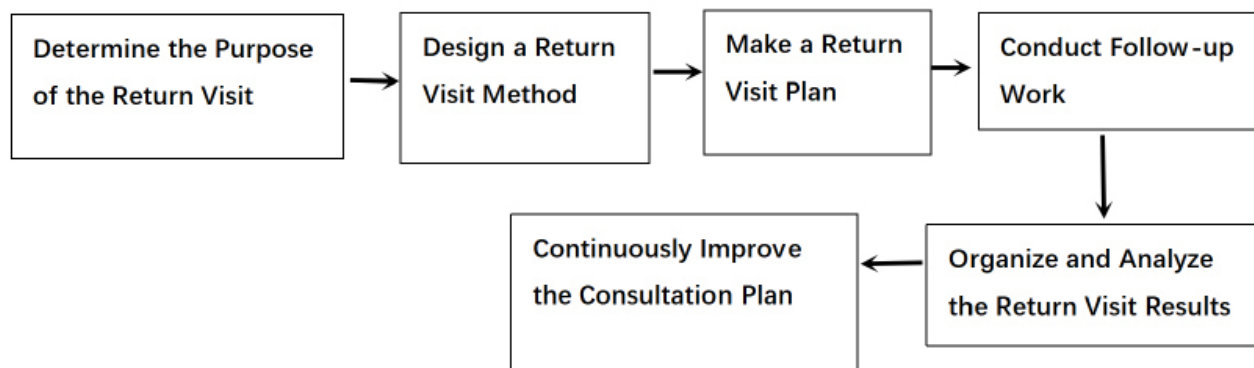


Figure 2.4 Follow-up Implementation Process

The "ATR Three-Stage Progressive and Circular Career Counseling Model" is a set of career counseling model that is relatively complete for teachers who are pre-entering the profession, especially the "Pre-Employment Training + On-the-Job Practice" proposed in the model has a significant impact on the career counseling effect.

### 3 Methodology

#### 3.1 Research Design

This study aimed to help new teachers create a better tomorrow through a career development model and career counseling program, utilized the design research. According to Tao, L. S. (2019) design research is employed to design and develop an intervention (such as programs, teaching-learning strategies and materials, products and systems) as a solution to a complex educational problem as well as to advance knowledge about the characteristics of these interventions and the processes to design and develop them. This study will base its career development and career counseling program on the "ATR Model" to help prepare new teachers for their future teaching roles.

#### 3.2 Participants of the Study

This study involved three participant groups. The first group consisted of 347 graduating students from two public normal universities in China, providing data on their attitudes towards career counseling, personal aspirations, professional abilities, and alignment with industry demands.

The second group included five experts who evaluated the career development model and the career counseling programs developed.

The third group comprised the 35 new teachers who evaluated the acceptability of the career development model and the career counseling programs developed.

#### 3.3 Research Instruments

Two main instruments were utilized in this study. The first was a questionnaire designed by the researcher, divided into five parts: Part I: New Teachers' Profile, with four items on personal data. Part II: Career Counseling Attitude, with seven yes-no items scored as 0 for "No" and 1 for "Yes," categorized into Poor, Good, or Very Good Attitude. Part III: Personal Aspiration, with six yes-no items scored similarly and categorized into Low, Average, or High Personal Aspiration. Part IV: Professional Abilities, with 12 yes-no items scored as 0 or 1, and categorized into Low, Average, or High Professional Skills. Part V: Industry Needs and Requirements, with eight yes-no items scored as 0 or 1, and categorized into Low, Average, or High Compliance.

The second instrument, adapted from Yang M E. (2022), evaluated the acceptability of the career development model and consultation program. It was validated by experts and offered respondents a five-point scale to rate each item's evidential value.

#### 3.4 Validity and Reliability of the Data-Gathering Instrument

A team of five professors from West Visayas State University, experts in test construction, reviewed and improved the questionnaire. To establish reliability, it was administered to 30 new

teachers (not study participants), resulting in a Cronbach's alpha of 0.876, which is acceptable ( $\geq 0.70$ ), confirming the questionnaire's reliability.

#### 3.5 Data - Gathering Procedure, Processing Procedure, Analysis Procedure

To gather data, the researcher obtained approval from the heads of two public normal universities and distributed a self-made questionnaire to new teachers there. After collection, the researcher ensured all questions were answered and encoded the data using Microsoft Excel. The data was then processed with SPSS. Analytical tools included frequency counts to determine the number of new teachers in each category, percentage analysis to find proportions within categories, means to assess averages on career counseling attitudes, aspirations, competencies, and industry expectations, and standard deviation to measure homogeneity or heterogeneity among new teachers in these aspects.

### 4 Results and Discussion

This part presents and discusses the descriptive analyzes and interpretation of the data gathered.

#### 4.1 Profile of New Teachers

Table 4.1 New teachers' Profile

Category	f	%
Entire group	347	100
Sex		
Male	103	30
Female	244	70
Age		
Below 21 years old	17	5
22-24 years old	275	79
25-27 years old	55	16
Educational Attainment		
College	17	5
Undergraduate	281	81
Graduate and Above	49	14
Professional Career Status		
Be on the Job	31	9
Unemployed	316	91

Table 4.1 shows 70 % of new teachers are women and 30 percent are men, reflecting the predominance of women in the teaching profession. Social attitudes and cultural background may influence men's interest in the education industry, while a stable working environment is more attractive to women. New teachers are mainly 22-24 years old, accounting for 79%, followed by 25-27 years old. Most students start school at the age of 18, graduate at about 22 for undergraduates and 21 for junior college students. Eighty-one percent of new teachers have a bachelor's degree, 14 percent have a graduate degree, and 5 percent have a college degree, indicating that college graduates are more inclined to work in education. 91% of new teachers are not employed, and only 9% are employed, reflecting the challenging job market, with normal students facing fierce competition and employment difficulties.

**Table 4.2 Attitude Towards Career Counseling among New Teachers when Taken as Whole and when Grouped as to Sex, Age, Educational Attainment, and Professional Career Status**

Category	SD	M	Description
Entire group	0.82	4.81	Good Attitude
Sex			
Male	0.89	4.91	Good Attitude
Female	0.79	4.77	Good Attitude
Age			
Below 21 years old	0.65	5.05	Very Good Attitude
22-24 years old	0.84	4.79	Good Attitude
25-27 years old	0.77	4.85	Good Attitude
Educational Attainment			
College	0.69	5.11	Very Good Attitude
Undergraduate	0.84	4.79	Good Attitude
Graduate and Above	0.79	4.83	Good Attitude
Professional Career Status			
Be on the Job	0.84	4.77	Good Attitude
Unemployed	0.83	4.81	Good Attitude

Note: Range of Mean Scores Interpretation

- 0.00-2.99 Poor Attitude
- 3.00-4.99 Good Attitude
- 5.00-6.00 Very Good Attitude

Table 4.2 indicates that new teachers, on average, exhibit a positive attitude towards career counseling (M=4.81, SD=0.82). Those aged 21+ and in college had very good attitudes (M=5.05, SD=0.65) and (M=5.11, SD=0.69), respectively. Both genders, ages 22-27, with undergraduate or graduate degrees, employed or unemployed, had average attitudes (M=4.77-4.91).

Most new teachers seek career counseling, with a high homogeneity of attitudes (SD=0.69~0.89). The enthusiasm of those under 21 reflects younger generations' emphasis on career planning, influenced by higher education and the information age. Professional career counseling services, becoming more specialized, help individuals identify strengths, interests, and goals, plan ahead, and enhance competitiveness, benefiting all career stages.

**Table 4.3 The Personal Aspiration among New Teachers When Taken as Whole and When Grouped as to Sex, Age, Educational Attainment, and Professional Career Status**

Category	SD	M	Description
Entire group	1.01	4.83	Average Personal Aspiration
Sex			
Male	1.01	4.86	Average Personal Aspiration
Female	1.01	4.82	Average Personal Aspiration
Age			
Below 21 years old	0.74	5.05	High Personal Aspiration
22-24 years old	1.00	4.82	Average Personal Aspiration
25-27 years old	1.11	4.80	Average Personal Aspiration

Educational Attainment			
College	0.72	5.17	High Personal Aspiration
Undergraduate	1.00	4.82	Average Personal Aspiration
Graduate and Above	1.12	4.77	Average Personal Aspiration
Professional Career Status			
Be on the Job	0.83	4.67	Average Personal Aspiration
Unemployed	1.02	4.85	Average Personal Aspiration

Note: Range of Mean Scores Interpretation

- 0-2.99 Low Personal Aspiration
- 3.00-4.99 Average Personal Aspiration
- 5.00-6.00 High Personal Aspiration

Table 4.3 reveals that the overall level of personal aspiration among new teachers is moderate (M= 4.83, SD=1.01). New teachers who are 21 years and above and in college had high personal aspiration (M=5.05, SD=0.74), and (M= 4.82, SD=1.00), respectively. Both males and females, those with 22-24 years old, and 25-27 years old, undergraduate, graduate and above, be on the job and unemployed had average attitude. The average mean values obtained ranged from 4.67- 4.86).

Most new teachers show low enthusiasm for career planning. The narrow SD range (0.72-1.12) indicates homogeneity in personal aspirations. This may be due to: young people's high expectations for their careers; older individuals' greater realism and focus on stability; educated people's more rational and grounded expectations; and unemployed individuals' urgent need to achieve personal aspirations to find satisfying work and overcome unemployment.

**Table 4.4 The Professional Skills among New Teachers Taken as Whole and When Grouped as to Sex, Age, Educational Attainment, and Professional Career Status**

Category	SD	M	Description
Entire group	1.81	8.90	Average Professional Skills
Sex			
Male	1.71	8.91	Average Professional Skills
Female	1.85	8.90	Average Professional Skills
Age			
Below 21 years old	1.42	9.17	High Professional Skills
22-24 years old	1.82	8.89	Average Professional Skills
25-27 years old	1.86	8.85	Average Professional Skills
Educational Attainment			
College	1.57	9.35	High Professional Skills
Undergraduate	1.80	8.88	Average Professional Skills
Graduate and Above	1.94	8.87	Average Professional Skills

Professional Career Status			
Be on the Job	1.70	8.67	Average Professional Skills
Unemployed	1.82	8.92	Average Professional Skills

Note: Range of Mean Scores Interpretation

- 0.00-3.99 Low Professional Skills
- 4.00-8.99 Average Professional Sills
- 9.00-12.00 High Professional Skills

Table 4.4 shows that the professional skills of new teachers as a whole was average (M=8.90, SD=1.81). Regardless of the groupings in various categories: sex, age, educational attainment, and professional career status, the professional skills of the new teachers was average. The average mean values obtained ranged from (3.80 - 4.57).

**Table 4.5 The Industry Needs and Requirements among New Teachers when Taken as Whole and when Grouped as to Sex, Age, Educational Attainment, and Professional Career Status**

Category	SD	M	Description
Entire group	1.41	4.47	Average Compliance
Sex			
Male	1.37	4.57	Average Compliance
Female	1.43	4.43	Average Compliance
Age			
Below 21 years old	1.62	4.47	Average Compliance
22-24 years old	1.36	4.49	Average Compliance
25-27 years old	1.60	4.40	Average Compliance
Educational Attainment			
College	1.62	4.47	Average Compliance
Undergraduate	1.36	4.50	Average Compliance
Graduate and Above	1.62	4.32	Average Compliance
Professional Career Status			
Be on the Job	1.44	3.80	Average Compliance
Unemployed	1.39	4.54	Average Compliance

Note: Range of Mean Scores Interpretation

- 0 - 2.99 Low Compliance
- 3.00 - 5.99 Average Compliance
- 6.00 - 8.00 High Compliance

Table 4.5 indicates that new teachers demonstrated an average

level of compliance with industry needs and requirements (M = 4.47, SD= 1.41).

This is suggesting that new teachers need some career consultation and counseling so they could comply the industry needs and requirements, hence they could easily get the teaching job.

The obtained standard deviation which ranged from (1.36 – 1.62), indicate the narrow dispersion of the obtained means, signifying the homogeneity of the new teachers in terms of their compliance to industry needs and requirements.

This imply that school guidance counselors should review their career guidance counseling so they may include activities that may address the need of the new teachers to be aware of the industry needs, and on how they could comply with those needs and requirements.

**Table 4.6 Level of Acceptability of the Training Program for New Teachers in terms of Objectives and Activities**

	n	SD	M	Descriptive Rating
Characteristics of the Specific Objectives of the Training Program	35	0.56	4.15	Very Good
Characteristics of the Activities of the Training	35	0.63	4.03	Very Good
Overall Mean	35	0.59	4.09	Very Good

Note: 1-1.80 - Poor 1.81-2.60 - Fair 2.61-3.40 – Good 3.41-4.20 – Very Good 4.21-5 - Excellent

Table 4.6 demonstrates that the overall acceptability of the "ATR Model" training program among new teachers is rated as very good (M=4.09, SD = 0.59). In terms of the characteristics of the objectives, the level of acceptability was very good (M= 4.15, SD=0.56); likewise in terms of the characteristics of the activities (M= 4.09, SD 0.63)

## 5 Summary, Findings, Conclusions, and Recommendations

This part presents the summary, findings, conclusions, and recommendations of this study.

### Summary

This study aimed at helping new teachers for a brighter tomorrow through the “ATR Three-Stage Progressive Cyclic Career Counseling Model” for career counseling Specifically, the study has the following objectives:

- 1.To determine the profile of new teachers taken as a whole and in terms of sex, age, educational attainment, and professional career status;
- 2.To determine the career counseling attitude, personal aspiration, and professional ability among new teachers taken as a whole and in terms of sex, age, educational attainment, and professional career status;
- 3.To determine the industry needs and requirements expected among new teachers taken as a whole and in terms of sex, age, educational attainment, and professional career status;
- 4.To analyze, design, develop, implement, and evaluate career development model and career counseling program;

5.To determine the acceptability of the designed career development model and career counseling program.

### Findings

The findings of the present study are as follows:

1. Majority of the new teachers were female, 22 – 24 years old, undergraduate and unemployed.

2. The attitude towards career counseling of the new teachers was good when grouped as to sex, and professional career status. When grouped as to age, those who were 22-24 years old and when grouped as to educational attainment, those who were in college had very good attitude towards career counseling.

3. The personal aspiration and professional ability of the new teachers were average when grouped as to sex, and professional career status. But when grouped as to age and educational attainment, those who were 22-24 years, and in college had high personal aspiration and professional ability.

4.The industry needs and requirements among new teachers was average compliance.

### Conclusions

Based on the findings of this study, the following conclusions can be drawn.

1.New teachers have a positive attitude and need to design

career counseling and development programs.

2.New teacher's personal ambition needs to be improved and should integrate activities with clear goals.

3.New teachers have ordinary professional skills and need to strengthen teaching methods and communication training.

4. The employment prospects for new teachers are not favorable, hence the need to enhance the planning and training for resume writing and interview skills.

### Recommendations

In order to improve the career adaptability of new teachers. To this end, we put forward the following suggestions:

1. For new teachers' personal ambition, professional skills and employment ability, design customized professional development mode and consulting projects.

2. To encourage new teachers to make full use of the professional consulting services provided by the school to meet their individual needs.

3. New teachers should actively participate in tailored project activities, to promote professional and personal growth.

4. Career guidance counselors should strictly follow the project design, cooperate with teachers and other school staff, and work towards building a better future for new teachers.

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