

# Analysis of Achievement Scale for the Students of Sana'a Community College (Yemen)

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**Abstract:** Fear of having poor language competence disappears when the quality of academic achievement is remarkable among learners. Students at Sana'a Community College (SCC) have to perform effectively in their academic pursuits which adjusting with the aspirations and philosophy of the Vocational and Technical Institutions. This philosophy believes in solving the disparity of social and economic problems by supplying the industry with middle-level professionals for increasing the employment prospects and relevant life-long learning skills and adaptability. In the workplace, these learners will be treated as professionals. They will have to learn new aspects of life such as performing new things, being independent, possessing vocational skills and generic knowledge, being aware of the work ethics and the prevalent competition soul. Consequently, the number of unemployed youths will decrease.

In this paper, the researchers constructed Technical English Learning Package (TELP) to assess the achievement of SCC students in English through the 'Achievement Test' which is developed for facilitating the course disciplines which are linked with life skills. The initial pools of 40 test items were constructed and given to the experts in the field for suggestions and validation. Discriminative Index (DI) and Difficulty Index (DF) were used to calculate the reliability of this tool. Thus, the 40 items were selected to form the final tool.

**Index Term - Achievement, Sana'a Community College.**

## I. INTRODUCTION

The Yemeni government pays attention to Technical and Vocational Education; Community Colleges System (CCS) in particular. Several projects in the developing countries are supported by some international organizations like UNESCO and the World Bank with funds; the CCS is one of them. Such support aims to improve the capacity of Technical and Vocational Institutions (TVIs). Thus, these programs out-put can meet the needs of the labor market (Gervedink Nijhuis, Voogt, & Pieters, 2012).

Recently, providing the labor market with entry-level skills graduates are becoming insufficient because the current needs are increased and went beyond that. The employers are tracing the graduates who possess adequate vocational skills who can be creative and aspirant for learning new things. These types of graduates will be good leaders in their work environment, good representatives for their local labor market abroad, and can work independently when required, have generic knowledge and awareness of the work ethics. (Baqadir et al., 2011; Lai & Lo, 2008) cited in Albashiry, Al-Arekey (2014)

Sana'a Community College (SCC) adopted the American Community College model. It has a new educational philosophy for those who successfully completed 12 years in high school. It is the pioneer of the Yemeni Technical Vocational Institutions (YTVIs). It started operating in 2000 to pace the fast-changing of the community and labor market needs with its trend to make a balance between the high education graduates and the vocational graduates.

One of the educational philosophies of SCC is to prepare its graduates with professions and multiple-skills. English is taught at SCC for three continues years as an essential foreign language but not as a profession, thus, it plays an important role.

On the other hand, the curriculum designers at SCC do not have written policies to be followed. These policies should pace with students' needs to be compatible with the labor market needs and changes. Alzubairy (2009) in the findings of his study which cited in (Albashiry et al) declares that the SCC curriculum needs some improvements by integrating new courses that address certain vocational skills. Employability skills and restructuring the student industrial internship should be given more attention. However, it was emphasized that hands-on-learning experiences are offered to the students in the college.

Particular operational steps and well-constructed tools are the basics of needed methodology for collecting data to find out solutions for the problem while conducting any type of study. In other words, the research method depends on the process that describes the multiple procedures used to align the collected data with its results. For instance, any research begins with finding a research problem, choosing the appropriate method, tools to gather data, and techniques to analyze and interpret the data to discuss the findings, solutions, and recommendations in the study. Thus, this study used the experimental method. Moore, D., & McCabe, D. (1993) believe that establishing a carefully designed experiment will cause an obvious effect on the controlled variables to show a certain response for that cause.

For testing the hypotheses in the experimental method, the researcher manipulated the independent variable for providing an empirical observation about them to provide a cause-and-effect relationship. Gay, L. R. (1992) declares: "The experimental method is the only method of research that can truly test hypotheses concerning cause-and-effect relationships". He believes that the advancement of education as a science can be done by adopting the experimental method; it is considered as the most valid approach to solve problems practically or theoretically.

The Achievement Test aims to measure performance in specific knowledge or skills learned within a specific period of time. Teachers use it for instructional and diagnostic purposes, so they can verify the learner's weakness that needs to be improved or the problems they face that need to be solved. Moreover, it measures their strength, concrete knowledge, and actual skills which are discovered through conducting achievement tests.

## II. DEVELOPMENT OF THE ITEMS

Based on the content of the Technical English Learning Package (TELP), the researcher constructed 40 different question items that comprised the 'Achievement Test'. These questions were covering all the TELP aspects. The researcher examined the 40 items carefully and the final draft was given to a number of experts in the field including the guide of the research. They were given the tool for the purpose of the examination in terms of their validity, the ambiguity of the words used, length of the statement, the appropriateness of the situations taken. Based on their comments and suggestions, the researcher has done all the modifications for the required items. As a result, a total of 40 items was retained in the test for try-out.

## III. FORMAT AND NATURE OF THE ITEMS

To construct the achievement tool, the researcher was referring to the constructed Technical English Learning Package (TELP) relative research studies and relevant literature. There were 40 question-items constructed and covered 4 different dimensions as follows:

1. Dimension 1 was presenting an introduction about Interpersonal Skills (IS) and covered 11 different questions on the meaning, types, aspects, and usages of IS.
2. Dimension 2 presented the general importance of IS in life and labor-market and the reasons for its importance; it covered 5 different questions in this regard.
3. Dimension 3 covered some specific types of IS which are considered as an important skill for the learners in their studies and in their employment after graduation; it covered 8 different questions as well.
4. Dimension 4 covered the importance and usages of IS. This part supplied the learners with a number of guidelines to be followed in developing their IS; its competencies are 17 different questions in this regard.

## IV. RESPONSE PATTERN

Every constructed question in the achievement test was followed by an answer; each answer was followed by 4 multiple-choices. The 4 constructed multiple-choices hold one key-answer while the rest 3 were distracters. Respondents had to comprehend the questions and spot the key-answer; otherwise, they will commit mistakes. The respondents were prevented to use any type of dictionaries. The allotted time given to the respondents for completing the achievement test question-paper was open.

## V. SCORING PROCEDURES

It was already pointed out that every question-item holds 4 multiple-choices; one is the key-answer while the rest three are distracters. As a result, the key-answer weighted 1 mark and the distracter carries 0 mark. Thus, the total scores of the test were 40. Regarding the guidelines evolved above, the scoring for each respondent was marked. Then the total scores for all the respondents were gathered and calculated for getting the total score for that each one had scored.

## VI. ESTABLISHING VALIDITY

The statements of the achievement scale are related to the area of study and each one of them constructed to focus independently on what is required to be measured; which confirms the validity face of the constructed scale. The 12 experts in the field of Education and English for Specific Purposes including the Research guide agreed that the content of the questions which are relevant and worthwhile for data collection and they gave some valuable suggestions. Based on their suggestions, the researcher did the modifications that were highlighted to finalize the draft. This implies that the 'Achievement Test' scale is comprehensive and relevant to the current study.

## VII. ESTABLISHING RELIABILITY

### 7.1 Try-out of the Tool

To make a selection from the pool of 32 items, the tryout of the tool was done. The researcher selected 30 students from level one in Financial and Banking Science Discipline in the Diploma System at SCC for the purpose of the tryout. The researcher applied the same procedures on the two samples; the tryout sample and the experiment sample. The medium of instruction used with the two samples was the same; the level of the students, the number of the students, the time of conducting the scale, etc were the same. Both; Arabic and English languages used as the medium-instruction with the two disciplines' students who participated in the try-out sample and experimental sample; both are affiliated to SCC. The age of the students in both groups was almost the same. In the introductory session, the researcher gave instructions and information about the purpose of the research and the reason for conducting the test. Thus, students felt comfortable during the try-out. Additionally, they were allowed to take their time in responding to the question-items.

### 7.2 The Difficulty Index and Discriminative Index

To assess the Academic Achievement of the students of Sana'a Community College in Technical English Learning Package, the researcher has prepared 40 question-items. As mentioned earlier, each frame in the package was covering one portion of the information. Thus, each question in the achievement tool was generated based on that. Each question-item has four alternatives; the items are in the form of multiple-choice questions and the correct choice carries one mark. Based on the Research guide's suggestion, a few modifications were done for the tool items. Hence the tool was sent to the experts for giving their suggestions. Consequently, 40 items were retained based on their suggestions, so these 40 items were used for try-out.

### 7.3 Results of Tool Validation:

The researcher has prepared a blueprint and developed 40 items taking into consideration the different dimensions used in constructing the TELP. This tool had been administered to 30 students of the first level students in Financial and Banking Science Discipline in the Diploma System at Sana'a Community College, Yemen. The Difficulty Index (DF) and Discriminative Index (DI)

calculation have some indications as follows: if the DI of the question-items score 0.35 and above, then it will be considered as Excellent questions, if DI 0.25 to 0.34, it will be considered as good questions, if the DI 0.15 to 0.24, it will be considered as revise/marginal questions and finally if the DI Below 0.15, it will be considered as poor questions. Based on the results the researcher has chosen all the 40 questions. After the tryout, 36 questions (DI 0.35 and above) were considered as Excellent questions, 06 questions (DI 0.25 to 0.34) as good questions. Based on the results the researcher has chosen the 40 questions.

#### The final Form of the Achievement Test

Sl. No	Items	Corrected item-total correlation	Remark
1.	People can exchange information, feelings, and meaning using...	0.551	Excellent
2.	Interpersonal Communication is the process by which people exchange information, through:	0.344	Good
3.	Interpersonal communication can happen through two ways; speaking which is called verbal language or through facial expressions, gestures and body language which is called	0.542	Excellent
4.	The major aspect of interpersonal communication depends on	0.302	Good
5.	Being able to receive, collect and share information during communicating with others that means you are:	0.507	Excellent
6.	The person who can convince others and makes them change their attitudes and behaviors is:	0.539	Excellent
7.	Our Formal Interpersonal communication can be with:	0.496	Excellent
8.	People are involved actively and react emotionally with our interpersonal messages when we combine behaviors with movement. "Emotional Interpersonal Messages" mean	0.541	Excellent
9.	Listening and showing concern to people when they speak and share thoughts or needs is the best way to avoid	0.573	Excellent
10.	The skill which requires time and effort to decide which solution is the best for a problem is called	0.574	Excellent
11.	The skills which enable you to take action beforehand in order to manage the problem before it happens or to be ready for what will happen are called	0.536	Excellent
12.	The daily social and professional communication skills which can be mentioned in the resume to show our positive advancement in career is known as	0.566	Excellent
13.	Interpersonal skills are a combination of	0.557	Excellent
14.	Employers prefer to hire a person who has strong interpersonal skills. "Strong Interpersonal Skills" means	0.548	Excellent
15.	Interpersonal skills improve our professional and social life skills. That means	0.568	Excellent
16.	A person with multi-personal qualities usually has	0.490	Excellent
17.	Interpersonal skills are the basic part of	0.534	Excellent
18.	There are several ways used in verbal communication skills. It is not only what we say, but it is also how to say it. Several ways are	0.528	Excellent
19.	What we say with our body using facial expressions, eye contact, voice tone, and body posture are	0.334	Good
20.	The ability to explain the received verbal and non-verbal messages including care, attention, gestures and body signs is called	0.526	Excellent
21.	The skill to receive and deliver messages to solve conflicts and reach a compromise or agreement to avoid argument and dispute between people is called	0.510	Excellent
22.	Working with others to find a suitable solution for a problem is called	0.523	Excellent
23.	The process of exploring and analyzing the most suitable options to make the right decision known as	0.508	Excellent
24.	The social skill allows us to communicate our values, ideas, beliefs, opinions, and needs freely, clearly and openly in order to avoid negative conflicts is called	0.677	Excellent
25.	The skills describe our relationships with others which tell us how we can use them to manage our life and work are known as	0.547	Excellent
26.	People skills, interpersonal skills, social skills, and transferable skills all are other names for	0.529	Excellent
27.	The skills which describe job-specific skills that relate to specialized skills, technical skills, and professional skills are	0.507	Excellent
28.	In the workplace, your experience is necessary but your success depends on your relations with others. That means	0.478	Excellent
29.	Interpreting the received messages during the communication process in order to avoid misunderstanding requires	0.513	Excellent

30.	Listening and hearing are not the same. That means	0.535	Excellent
31.	To avoid misunderstanding and confusion, you have to be aware of	0.438	Excellent
32.	Anger leads to fast and unclear speech. So, avoid	0.550	Excellent
33.	To communicate effectively and efficiently, it is important to ask for clarification in order to	0.506	Excellent
34.	To attract people; manage your bad mood, anger, and disagreement with them by showing	0.328	Good
35.	The person who feels people and sees things from their perspective is	0.531	Excellent
36.	The physical response to what threatens you and make you nervous is called	0.532	Excellent
37.	The skill of expressing feelings and beliefs using clear and respected ways and avoiding passive or aggressive views during negotiation is known as	0.485	Excellent
38.	Learning from our past will help us to improve our	0.551	Excellent
39.	The skill of finding agreeable results in order to keep others' mutual respect and trust to avoid argument and dispute between people is called	0.576	Excellent
40.	The skill of working with different backgrounds people in social, professional or business sittings for solving problems and performing tasks is known as	0.533	Excellent

#### 7.4 Selection of Items

The Difficulty Index (DF) and Discriminative Index (DI) calculation were used to find out how difficult/ simplicity the achievement test items are. The achievement test has indications as mentioned above. Thus, the researchers had chosen the 40 question-items based on the analysis carried out; a total number of the 40 items were selected for the final form of the test.

### VIII. CONCLUSION

The validated scale to measure achievement in English can be used to measure students-achievement in Technical English Learning Package (TELP) among the technical colleges' students of the Diploma System. It can be used to find out and analyze the students' achievement in various factors associated with technical English skills. So, necessary steps can be taken to create an environment in which the emphasis can be given to enhance achievement levels among students in their learning process.

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