COACHING IN COMMUNICATION SKILLS: ONLINE LEARNING USING E-MICROMODULES

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INTRODUCTION

National Association of Colleges and Employers' (2021) Career Readiness Competencies

COMMUNICATION

Clearly and effectively exchange information, ideas, facts, and perspectives with persons inside and outside of an organization.

SAMPLE BEHAVIORS

- Understand the importance of and demonstrate verbal, written, and non-verbal/body language, abilities.
- Employ active listening, persuasion, and influencing skills.
- Communicate in a clear and organized manner so that others can effectively understand.
- Frame communication with respect to diversity of learning styles, varied individual communication abilities, and cultural differences.
- Ask appropriate questions for specific information from supervisors, specialists, and others.
- Promptly inform relevant others when needing guidance with assigned tasks.

CONSTRAINTS IN THE F2F COACHING APPROACH

- The teaching of communication skills often takes the coaching approach – lessons are conducted in face-to-face classrooms where after brief turns of instruction, students could receive personalized coaching on their areas of weakness.
- Constraints
  - Curriculum time
  - Resources (scalability)
  - Cost
- Impact: With typically two touch points, the effects of this instruction may not go beyond the duration of the module or the period of the students' candidature in the university.
- Additional touch points: The Writing Centre, embedded classroom instruction. These face similar constraints

CURATING ORIGINAL E-MICRO MODULES

- The Singapore Institute of Technology, an applied learning university
- Intake of students mainly from the polytechnic (applied learning) route vs GCE A levels or IB route
- Decision made to curate original e-micromodules (each topic about 6-8 minutes long) based on students' needs, to support students
  - in the flow of their work during their internship and studies
  - in a more permanent manner (accessible to students in the LMS throughout their candidature in the university)
  - using the blended learning approach.
- Advantage: Can be reused and repackaged for multiple purposes with a one time development cost

OBJECTIVE OF THE STUDY

This presentation investigates one of these e-modules (i.e. the Interpersonal Skills e-module) to determine whether it was effective in improving students' communication skills in six areas:

- Conversing with Confidence
- Building Relationships
- Exchanging Feedback
- Handling Face-to-Face Interviews
- Managing Conflicts and
- Presenting Effectively

METHODOLOGY

46 students from the Bachelor of Systems Engineering program who were taking the *Interpersonal and Work Communication* module were invited to participate in the study. The students were informed that participation in the study was an optional learning activity and the e-topics sought to complement their blog and presentation assignments:

- Converse with Confidence (week 2) - blog #1 – strengths and challenges when communicating
- Build relationships (weeks 8 and 9) - blog #2 – evaluating listening skills and nonverbal behaviour
- Exchange feedback (weeks 8 and 9) - blog #3 – resolving interpersonal conflicts
- Handle face-to-face interviews
- Managing conflicts (weeks 4b and 5a) blog - #3 – resolving interpersonal conflicts
- Present effectively (weeks 5b and 10a) – on group project

METHODOLOGY

- The survey results of each individual student were collated from the university's learning management system. The pre-survey results were then matched to the corresponding post-survey results. Only results that had pre-post survey responses were included in the analysis.
- When the number of students who had pre-post survey responses was more than 30 students for a question, a paired sample T-test was used ($p<0.05$).
- When the number of students who had pre-post survey responses was less than 30 students per question, the Wilcoxon Signed Rank test was used.
- The null Hypothesis was: The mean response of the respondents do not differ significantly for the pre- and post-survey.
- The alternate Hypothesis was: The mean response of the respondents is significantly higher for the post-survey than the pre-survey.

DATA ANALYSIS

n	test statistic
5	0
6	2
7	3
8	5
9	8
10	10
11	13
12	17
13	21

RESULTS

- The findings showed that there was
  - a statistically significant difference in the students' mean responses for the post-survey compared to the pre-survey for the Building Relationships, and Exchanging Feedback e-topics;
  - mixed results for the Converse with Confidence, Handling Face-to-Face Interviews and Managing Conflicts e-topics
  - no statistically significant difference for the Present Effectively e-topic.

SURVEY RESULTS FOR BUILD RELATIONSHIPS

- Pre-survey: 24 respondents; post-survey: 8 respondents
- 7 respondents, one respondent did not answer question 4
- Since all the questions have the test statistic less than 3 (2 for question 4), we reject the Null Hypothesis and conclude that the mean response of the respondents is *significantly higher* for the post-survey compared to the pre survey.

SURVEY RESULTS FOR BUILD RELATIONSHIPS

Question		Test statistics
1	I am able to approach others in a work setting	0*
2	I am able to engage others in a work setting	0*
3	I am able to build trust and rapport within five minutes of interaction	0*
4	I am able to work with others on projects	0*
5	My confidence level in building relationships	0*

SURVEY RESULTS FOR EXCHANGE FEEDBACK

- Pre-survey: 39 respondents, post-survey: 15 respondents
- 13 respondents answered all questions.
- Since all the questions have the test statistic less than 21, we reject the Null Hypothesis and conclude that the mean response of the respondents is *significantly higher* for the post-survey compared to the pre-survey.

SURVEY RESULTS FOR EXCHANGE FEEDBACK

Question		Test statistics
1	I am able to overcome the fear of receiving feedback	12*
2	I am able to respond appropriately to feedback	14.5*
3	I am able to motivate others through constructive feedback	10.5*
4	I am able to develop others through constructive feedback	5*
5	My confidence level in exchanging feedback	7*

SURVEY RESULTS FOR CONVERSE WITH CONFIDENCE

- Pre-survey: 22 respondents; post-survey: 6 respondents
- 5 respondents answered all the questions.
- For question 1, the test statistic is less than or equal to 0, and we reject the Null Hypothesis and conclude that the mean response of the respondents is *significantly higher* for the post-survey than the pre-survey.
- For the rest of the questions (2,3) the test statistic is greater than 0, and we do not reject the Null Hypothesis and conclude that the mean response of the respondents do *not differ significantly* for the pre- and post-survey.

SURVEY RESULTS FOR CONVERSE WITH CONFIDENCE

Question		Test statistics
1	I am able to build trust and rapport during interactions with others	0*
2	I am able to get my point across in one-to-one meetings with others	4
3	I am able to get my point across in small group discussions with others	2.5
4	My confidence level in conversing with confidence	2.5

SURVEY RESULTS FOR HANDLE FACE-TO-FACE INTERVIEWS

- Pre-survey: 20 respondents; post-survey: 6 respondents
- 6 respondents answered all questions.
- For questions 1 and 3, the test statistic is less than or equal to 2, and we reject the Null Hypothesis and conclude the mean response of the respondents is *significantly higher* for the post-survey than the pre-survey.
- For question 2, the test statistic is greater than 2, and we do not reject the Null Hypothesis and conclude that the mean response of the respondents *do not differ significantly* for the pre- and post-survey.

SURVEY RESULTS FOR HANDLE FACE-TO-FACE INTERVIEWS

Question		Test statistics
1	I am able to understand what interviewers are looking for in a potential hire.	2*
2	I am able to understand how to create a good impression to impact hiring decisions	3
3	I am able to understand how to construct responses to interview questions	0*
4	My confidence level in handling face-to-face interviews	2*

SURVEY RESULTS FOR MANAGING CONFLICTS

- Pre-survey: 17 respondents; post-survey: 5 respondents
- 5 respondents, one respondent did not answer question 3
- For question 1, the test statistic is less than or equal to 0, and we reject the Null Hypothesis and conclude that the mean response of the respondents is *significantly higher* for post survey than pre survey.
- For question 2, the test statistic is greater than 0, and we do not reject the Null Hypothesis and conclude that the mean response of the respondents *do not differ significantly* for the pre and post survey.
- For question 3, we cannot make a conclusion due to the number of respondents being less than 5.

SURVEY RESULTS FOR MANAGING CONFLICTS

Question		Test statistics
1	I am able to express difference in opinions	0*
2	I am able to change the other person's mindset on the issue at hand	1.5
3	I am able to influence the other person's decisions and actions on the issue at hand	0+
4	My confidence level in managing conflicts	0*

+less than 5 respondents

SURVEY RESULTS FOR PRESENT EFFECTIVELY

- Pre-survey: 17 respondents; post-survey: 5 respondents
- 5 respondents answered all questions.
- For all the questions, the test statistic is greater than 0, and we do not reject the Null Hypothesis and conclude that the mean response of the respondents *do not differ* significantly for the pre- and post survey.

SURVEY RESULTS FOR PRESENT EFFECTIVELY

Question		Test statistics
1	I am able to determine the audience profile	2.5
2	I am able to create presentation content	1.5
3	I am able to deliver a presentation in an engaging manner	3.5
4	My confidence level in presenting effectively	5

CONCLUSION/IMPLICATIONS

- A breakdown of the analysis for the items in the survey provided an interesting picture on which communication skills could be effectively taught online and where other approaches might be more useful
  - a statistically significant difference for the Building Relationships, Exchanging Feedback e-topics – students could reflect on their own experiences (how they could be improved), having a live audience is not critical
  - statistically significant difference for some items for the Converse with Confidence, Handling Face-to-Face Interviews and Managing Conflicts e-topics – requires a live partner to simulate the need to think on the spot
  - no statistically significant difference for the Present Effectively e-topic – requires a live audience with the corresponding verbal and non-verbal cues for a meaningful presentation to take place
- Overall, e-micromodules provide a permanent e-resource for students to refer to
  - A scaffold is better than a vacuum

RESOURCES

- Lee, C. C. (2021). *Developing standalone original eLearning resources: Why do it?* https://elearningindustry.com/why-developing-standalone-original-elearning-resources-modules
- Lee, C. C. (2021). *A long-term view on the use of microlearning for organizations.* https://elearningindustry.com/long-term-view-on-use-microlearning-for-organizations
- Radhika, J., Blackstone, B., Lee, C. C., Lee, H. H., Padma, R., Ong, K. (2021). *Conceptualising and driving a writing –in-the disciplines initiative to enhance undergraduates' writing competence at a university in Singapore.* 15th International Writing Across the Curriculum Conference. https://iwac.colostate.edu/program/