Co-operative Education Project - Employers: Are they Happy?

BRENT WOOD  
Waikato Institute of Technology, Hamilton, New Zealand  
DENISS YEUNG  
Waikato Institute of Technology, Hamilton, New Zealand

BACKGROUND/INTRODUCTION

Business New Zealand listed the top 10 skills the employers look for are: communication skills, customer service skills, ability to work well in a team, literacy and numeracy skills, confidence learning about and using computers and technology, planning and organisational skills, initiative and a can-do attitude, problem-solving skills, good work habits and independence, and health and safety skills. (Career New Zealand n.d., para 2). It is essential for education institutes like Wintec to provide graduates with these skills to be employable and productive for businesses and society.

It is not uncommon that in job applications, employers require applicants to have some kind of relevant experience and for fresh graduates it is often a challenge. Volunteering work might be useful but as suggested by Hodges and Burchill that employers want ‘well-rounded’ graduates with a broad range of competencies (Hodges & Burchill, 2003, p. 19) Eastern Nazarene College (ENC, 2015, para 2) in United States found that internship in college provides students with well-rounded experience, resume and reference building, confidence, and a chance of getting hired.

The term "cooperative education" means “the provision of alternating or parallel periods of academic study and public or private employment to give students work experiences related to their academic or occupational objectives and an opportunity to earn the funds necessary for continuing and completing their education” (USLegal n.d., para. 1).

In 2015, Wintec offered a cooperative education project in the Bachelor of Applied Management programme for the first time. It is essential to obtain feedback from employers at an early stage for a performance check and continuous improvement to deliver quality education.

RESEARCH QUESTION

As a tertiary education provider, we need to know whether the graduates are meeting employers’ needs and expectations. If not, what, are the issues and the reasons and what we should do to improve student performance? This research focused on the following student skills:

- Organisational skills
- Technical skills
- Interpersonal skills

Furthermore, employers were given the chance to provide general comment about the student and about the programme, and the intention to host a Wintec business student in the future.
METHODOLOGY

Questionnaires with closed and open-ended questions were posted to fifty-six employers who hosted Wintec students. All fifty-six questionnaires were returned with some minor discrepancies but still usable.

There were three parts in the closed questions. The first part looked at organisational skills including, planning, problem solving, creative thinking, critical thinking and time management skills. The second part focused on technical skills consists of knowledge of practices, accuracy, speed of performance and adherence to directions provided. The third part addressed interpersonal skills including communication, co-operation, initiative, assertiveness, motivation, reliability and punctuality.

For each of these skills employers were asked to choose whether the student had exceeded expectations, met expectations, partly met expectations or did not meet expectation.

Ethical approval was obtained from Human Ethics Research Group, Waikato Institute of Technology prior to actual research.

FINDINGS

Quantitative

The results below are a combined total for the Bachelor of Applied Management and Graduate Diploma students.

There are five skills under the ‘Organisational Skills’ category, namely Planning, Problem Solving, Creative Thinking, Critical Thinking and Time Management.

- For Planning, 20 (35.7%) of the respondents said the student exceeded expectations, 30 (53.6%) met expectations and 6 (10.7%) partly met expectation.
- Seventeen students (30.5%) exceeded expectations in Problem solving, 37 (66.1%) met expectations, 1 (1.7%) partly met expectation and 1 (1.7%) did not meet expectation.
- For Creative Thinking, 21 (37.5%) students exceeded expectations, 29 (51.8%) met expectations, 4 (7.1%) partly met expectation and 2 (3.6%) did not meet expectation.
- Eighteen (32.1%) students exceeded expectations in Critical Thinking, 32 (57.2%) met expectations and 5 (9%) partly met expectation and 1 (1.7%) did not meet expectation.
- For Time Management, 25 (44.7%) students exceeded expectations, 20 (35.7%) met expectations, 11 (19.6%) partly met expectation.

In the ‘Technical Skills’ area, the five elements are Knowledge of Practice’s, Accuracy, Speed of performance and Adherence to Directions provided.

- Sixteen students (28.6%) exceeded expectations in Knowledge of Practice’s, 32 (57.1%) met expectations and 8 (14.3%) met expectations.
- For Accuracy, 18 (32.1%) students exceeded expectations, 34 (60.7%) met expectations, 3 (5.5%) partly met expectation and 1 (1.7%) did not meet expectation.
- Twenty-five (44.6%) students exceeded expectations in Speed of Performance, 25 (44.6%) met expectations and 6 (10.8%) met expectations.
- For Adherence to Directions provided, 27 (48.2%) students exceeded expectations, 23 (41%) met expectations and 6 (10.8%) partly met expectation.
Under Interpersonal Skills, the seven components are Communication, Co-operation, Initiative, Assertiveness, Motivation, Reliability and Punctuality.

- For Communication, 25 (46.4%) students exceeded expectations, 24 (41.1%) met expectations, 5 (8.9%) partly met expectation and 2 (3.6%) did not meet expectation.
- Thirty-four (60.7%) students exceeded expectations in Co-operation and 22 (39.3%) met expectations.
- For Initiative, 25 (44.6%) students exceeded expectations, 23 (41.1%) met expectations, 7 (12.5%) partly met expectation and 1 (1.8%) did not meet expectation.
- Nineteen (33.9%) students exceeded expectations in Assertiveness, 27 (48.2%) met expectations and 10 (17.9%) partly met expectations.
- For Motivation, 27 (48.2%) students exceeded expectations, 27 (48.2%) met expectations and, 2 (3.6%) partly met expectation.
- Thirty (53.6%) students exceeded expectations in Reliability, 24 (42.8%) met expectations and 2 (3.6%) partly met expectations.
- For Punctuality, 31 (55.4%) students exceeded expectations, 19 (33.9%) met expectations and 6 (10.7%) partly met expectation.

As shown in table 1 below, students were rated best in Co-operation with everyone exceeded or met expectations followed by Reliability and Motivation.

<table>
<thead>
<tr>
<th>Skills</th>
<th>Exceeded expectations %</th>
<th>Met expectations %</th>
<th>Partly met expectations %</th>
<th>Did not meet expectations %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-operation</td>
<td>60</td>
<td>40</td>
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<td>0</td>
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<tr>
<td>Reliability</td>
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<td>43</td>
<td>4</td>
<td>0</td>
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<tr>
<td>Motivation</td>
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<td>48</td>
<td>4</td>
<td>0</td>
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<tr>
<td>Punctuality</td>
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<td>34</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Speed of Performance</td>
<td>45</td>
<td>45</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Planning</td>
<td>36</td>
<td>54</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Adherence to directions</td>
<td>48</td>
<td>41</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Knowledge of practice</td>
<td>29</td>
<td>57</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Time management</td>
<td>44</td>
<td>36</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>34</td>
<td>48</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Initiative</td>
<td>45</td>
<td>41</td>
<td>12</td>
<td>2</td>
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<tr>
<td>Accuracy</td>
<td>32</td>
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<td>2</td>
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<td>Problem solving</td>
<td>33</td>
<td>59</td>
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<td>Critical thinking</td>
<td>32</td>
<td>57</td>
<td>9</td>
<td>2</td>
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<tr>
<td>Creative thinking</td>
<td>36</td>
<td>52</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Communication</td>
<td>44</td>
<td>43</td>
<td>9</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 1

**Qualitative**

1. Cooperative Education Project Students (Bachelor of Applied Management)

   *(a) Feedback regarding the student*

   In many cases, the employers used the prompts from the quantitative questions to provide qualitative feedback.
Personal Skills – The employers placed a lot of emphasis on this aspect of the work placement. Overall, the comments are positive and focusing on the soft skills that the student possessed and in many cases repeating the wording of the qualitative categories (Initiative, motivation etc.). Additional words to describe the student used such as enthusiastic, commitment, effort, time management, organisational skills, teamwork and communication.

Improvements needed – The improvements again related mostly to the soft skills that the employers felt were lacking. It comes down to a lack of work readiness of that student from the employer’s perspective. Whilst lack of product knowledge in the field is mentioned, it comes down to areas such as communication, motivation and initiative. This is particularly the case where English is a second language. The student’s expectations and the employer’s expectations perhaps do not meet.

(b) Comments and suggestions for improvements of the programme
Not every employer responded to this section, but for the ones that did approximately 55% felt that there needed to be a number of changes to the overall programme. The key comment was around the expectations of the business and the expectations of Wintec. To explain, many businesses would like to have more communication from Wintec and a visit from the supervisor for that student. This is to make clear to all parties how the placement will be conducted, plus ongoing checks that it is going according to plan.

(c) Will or will not host again
Not all employers completed this section, but for those that did 58% indicated that they would host gain.

2. Graduate Diploma Students

(a) Feedback regarding the student

Personal Skills – It is clear that the employers were looking for the same soft skills as shown above, however the feedback in this section shows that these students lack some of the skills of the Bachelor students mentioned above.

Improvements needed – The same areas for improvement are required as for the BAM students, only this time the need for improvement came across stronger. These students are primarily English as a second language and lack of communication was a major issue for many of the employers. It would seem that the students often did not understand the requirements asked by the employer. In addition, the student would not always communicate his/her need or confusion often due to English language and an understanding of expectations.

(b) Comments and suggestions for improvements of the programme
This section again echoes the comments from the degree students as above, but there is a stronger emphasis on the fit of the student for the placement. The employers are asking that we (Wintec) more closely vet each student’s suitability for the role. The same themes continue with a request for a visit from a Wintec tutor, with a clear plan for what is required of the student and the business.

(c) Will or will not host again
Not all employers completed this section, but for those that did 44% indicated that they would host gain. This must be read in context, as 35% of the employers did not answer this section at all.
DISCUSSION

Quantitative

As shown in Table 1 in the Findings section,

There is room to improve in initiative, accuracy, problem solving, critical thinking and in particular, creative thinking and communication skills.

Further analysis shows that Bachelor programme students were rated better than Graduate Diploma students were. Possible reason might be most of the Graduate Diploma students were from overseas (mostly Asian countries) and their previous study/learning styles might not be the same as here in New Zealand. Chuah (2010, Teaching East-Asian Students, para 3 & 5) found that a lot of Asian students were quiet, passive and more dependent on their lecturers, therefore they tend to struggle to take complete responsibility for their own learning. (Acadsoc, 2014, para. 2) also pointed out that ‘smart students would never dare to correct their teacher’s errors’ and Asian students are expected to memorise lessons, facts and concepts then recite them in the examination in order to score high marks. The fact that these overseas students joined the programme and had been with Wintec for just a few months there was not enough time for them to pick up the skills that the New Zealand employers were expecting.

Qualitative

1. Cooperative Education Project Students (Bachelor of Applied Management)

   (a) Feedback regarding the student

   **Personal Skills** - It is interesting to note that the bulk of the comments are related to the soft skills of students. This is consistent with what comments from employers over the last number of years.

   **Improvements needed** - It would seem that the employer wants the student more work ready and this strongly relates to the soft skills that the student does or does not possess. There is confusion between the minimum 120 hours that the student must do in the business and the benefits to that business. Therefore, the question to be asked is “Do the academic requirements of the placement (Assessments required by Wintec) and the needs of the business match up?”

   (b) Comments and suggestions for improvements of the programme.

   It is clear that Wintec needs to have more communication with the employer and give the employer direction regarding the expectations for hosting the student. It looks like that a number of employers felt abandoned by Wintec and that there was no direct benefit for that specific business. The other key area is for Wintec (and other providers of this programme) to be careful, to align academic requirements and any benefit for the business.
2. Graduate Diploma Students

(a) Feedback regarding the student

**Personal Skills** – The tertiary provider has less time with this cohort (compared to the BAM students) prior to the student engaging in the student project. Therefore, it is more difficult to facilitate the skills required for placement. This however must be attempted, and consequently Wintec has made changes to the programme for the Graduate Diploma in their first Semester with us. There is now an increased emphasis on the skills needed for success in the student placement.

**Improvements needed** – This area would have to be the most critical for the future success of the programme. The tertiary provider has less time to develop the skills for those students with English as a second language. Typically, this is the Semester of study before the project in the following Semester. The programme in the first Semester of study has been changed in order to address the areas of concern. The question needs be asked if these students are ready for placement in a New Zealand Context or perhaps a “desktop” study could be used for some of the students.

(b) Comments and suggestions for improvement of the programme

The suggestion regarding closer communication between Wintec and the employer has not been fully addressed. Perhaps due to lack of resources (staff and time) there is currently no plan for staff to visit the placements of the students. Concerning the expectations of the employer, we have made incremental changes, but it would seem that we have not fully addressed this issue. Each individual supervisor currently works with each student to assess the appropriateness of the project.

CONCLUSIONS AND RECOMMENDATIONS

Overall students rated better in Interpersonal Skills followed by Technical Skills and not as good in Organisational Skills.

The Bachelor of Applied Management (BAM) industry feedback was satisfactory except for one or two weak areas. Overall, the BAM student cohort seemed better able in all areas than the Graduate Diploma students. The recommendations below are largely generic, other than recommendation for the Graduate Diploma students in number 1 below.

**Recommendations**

1. The educational providers should consider putting more effort in assisting the **Graduate Diploma**, students to have them work ready. These may include skills such as communication, creative thinking, initiative, accuracy, problem solving, and reliability.
   a. A revised programme of study for the Graduate Diploma students in the semester prior to the placement.
   b. Additional English language testing and coaching.
   c. A suggestion that it may be desirable to limit those Graduate Diploma students who are going to placement to those with a B or B+ average. This will depend on a number of
issues, in particular that the tertiary provider meets the requirements of the graduate profile (Graduate profile, 2013) and the promise made to the student on enrolment.

2. **More communication** is required from the teaching provider to the employer hosting the student. This is particularly in the following areas:
   a. Matching of the student to the requirements of the business
   b. Clear expectations of the role of the business in the placement.
   c. Clear expectations of the student in that placement
   d. At least one visit from the supervisor of the student during the placement.
   e. An attempt to match the academic requirements of Wintec and the needs of the business.
   f. The use of online interaction on a regular basis with the employers. The form that this will take has not yet been decided.

3. Wintec needs to carry out a **new survey** to compare the results of the current study and determine the feeling of the employers in 2017. For this study, it is recommended to use of an online survey tool such as Qualtrics.
REFERENCE


