

Examiners' Report

January 2011

Principal Learning

Manufacturing Level 3 Controlled Assessments

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Contents Page

1. Chief Examiner's Report	1
2. Supply Chain Management in Manufacturing - Unit 3	3
3. Management of Resources and Working Practices in Manufacturing - Unit 4	5
4. Principles and Applications of Material Science in Manufacturing - Unit 6	7
5. Grade Boundaries	9

Chief Examiner's Report

Principal Learning in Manufacturing and Product Design - Level 3 - January 2011

General Comments

This is the second moderation series where all the available units for the Level 3 Principal Learning in Manufacturing and Product Design have been offered for moderation and award.

The specific reports for all units submitted for moderation are under the appropriate headings and, broadly speaking, learners performed at a reasonable standard. General comments related to the internal units are noted below.

In general, most aspects of administration for the internal units were satisfactory, with the correct samples being provided. Generally, each learner and the tutor signed a Candidate Record Sheet (CRS), and centre marks were recorded correctly on the CRS. However these are not being checked sufficiently and a few are missing key details. In some cases there is a lack of authentication of observation records and/or the CRS.

Most learner work was organised in such a manner that it was straightforward for the moderators to locate the evidence for each learning outcome (LO). There is an issue with assignment briefs not being provided in all cases. This would assist in the moderation process and is a practice that is encouraged. It is encouraging to see there is some evidence of internal moderation although this is not sufficiently explicit.

As in previous series there are some issues with the annotation of learner work. It would be helpful for assessors to annotate learner work to clearly identify where marks have been awarded, linked to the appropriate marking grid, with page numbers noted on the CRS. Indications such as LO1 (MB2), LO3 (MB1) etc. are very helpful to moderators. Centres are reminded that each unit specification has a section entitled 'guidance for allocating marks', which should be referred to when designing/completing summative assessments. The "what you need to learn" section is also helpful in determining the content and evidence requirements of assessments. Furthermore, centres may find it useful to refer to the Tutor Support Materials for this qualification when setting assignments that are to be internally assessed and externally moderated. This is in order to ensure that learners have the opportunity to address all of the assessment requirements, in each of the three mark bands, for each learning outcome. This could involve the use of annotated photographs and/or witness statements/learner observation records (the latter completed by the assessor), this is of particular relevance for marking grid B and other ephemeral evidence, which centres are actively encouraged to submit as assessment evidence.

Only three internally assessed units were submitted for assessment during this window.

Marks are moderated for marking grid A however some marking grid B evidence was noted including good use of observation records. Although not always fully authenticated these are useful for recording ephemeral evidence but of little value for marks awarded from marking grid A.

Principal Moderator's Report

Supply Chain Management in Manufacturing - Unit 3 - January 2011

General Comments

During this series, the internal marking for this unit was mixed; with some reasonably accurate and some very generous marks being awarded, consequently a significant number of marks were adjusted in order to match national standards. Some centres are not providing sufficiently authenticated candidate record sheets (CRS)

Learning Outcome 1 (Marking Grid A)

This outcome focuses on three principles. The importance of cost effectiveness in supply chain management, how supply and demand can be integrated across companies and the laws that apply to supply chain logistics.

Learners were able to provide an overview of the supply chain process and alluded to cost effectiveness in places, however there was no precise focus on this element in any of the work. Similarly the integration of supply and demand was mentioned throughout the reports rather than in one specific section. Learners mentioned laws quite specifically but few went beyond simply stating which ones apply to the supply chain. Although no learners were able to provide the amount of description expected of a level 3 learner there was much evidence that the best fit approach allows marks from MB2 to be awarded.

Learning Outcome 2 (Marking Grid A)

This outcome has two elements; how supply chain problems can be addressed through procurement, logistics and lean manufacturing and the importance of a customer focus through the supply chain. Few learners were able to go beyond a simple analysis of procurement however some good responses to issues of logistics are often spread throughout the work. The approach to lean manufacturing is mostly descriptive with little application to the supply chain.

Similarly the customer focus was interpreted as the importance of good customer relations and did not link sufficiently to the supply chain. Although learners went beyond limited explanations of the principles there is little evidence of a thorough explanation or justification, which are the requirements of a MB3 learner.

Learning Outcome 3 (Marking Grid A)

LO3 is separated into two elements, the first being an analysis of the supply chain process and the second being an opportunity to provide solutions to supply chain problems. There is an expectation that learners will consider strategic, operational and tactical ideas. The unit specification gives significant guidance on the types of evidence expected. Although learners often do not subdivide evidence in this way there is some evidence of a strategic awareness and operational considerations are in evidence throughout. The learners' evidence is often based upon local companies and the description of solutions employed by one company was often used as a solution for the other. This was often not supported with a sufficient understanding of the supply chain process. Consequently learners are not demonstrating the thorough understanding or analysis to justify marks in MB3.

Conclusions

There is a reasonable standard of work demonstrated by learners however the generic nature of evidence presented does not sufficiently focus on supply chain principles and closer reference to the unit specification is advisable.

Principal Moderator's Report

Management of Resources and Working Practices in Manufacturing - Unit 4 - January 2011

General Comments

The evidence presented for this unit was built around work placements carried out by learners and the performance often reflected the suitability of the placement and the support given to them whilst away from the centre. Consequently learner performance for this unit varied somewhat. The overall marks are relatively accurate however the spread is somewhat narrow, with the marks for the best learners being a little harsh whilst those for the lower ability learners are a little generous.

Learning Outcome 1 (Marking Grid A)

This outcome focuses on employment/operational practices and recruitment/training procedures. Learners gave an overview of the organisations they were placed with for their work placement. Descriptions of employment and operational practices including recruitment were generally well answered, however, the responses to training and development were less comprehensive because learners focused on their placements. The breadth of responses is somewhat narrow and this has not allowed them to fully access MB3 in many cases.

Learning Outcome 2 (Marking Grid A)

This outcome focuses on strategies used by supervisors to ensure effective contributions by employees. Learners explained some elements of the personal approaches of the supervisors they came across; this did not allow them to cover the anticipated breadth outlined in the specification, because of this learners did little more than give a brief description of strategies, for the most part restricting them to marks in MB1.

Learning Outcome 4 (Marking Grid A)

This outcome concerns employment law and the involvement of legislative bodies. Learners gave brief responses stating some of the laws/legislation with some outline of the implications within their placements. No learners were able to give the level of description required for MB3.

Conclusions

The assessment for this unit is often based on work placements carried out by learners. This is an approach that should be encouraged, however there are limitations. Because the entirety of the evidence presented is based upon these organisations there are some elements that have not been covered in sufficient detail. It might therefore be appropriate to include some extension activities to allow learners to access more of the MB3 criteria.

Principal Moderator's Report

Principles and Applications of Material Science in Manufacturing - Unit 6 - January 2011

General Comments

The majority of the learners have been marked with a reasonable degree of accuracy, a little generously on the whole but for the most part the "banding" of learners is appropriate. In some cases learners designed their own assessment briefs. Where this is the case the inclusion of these briefs would be useful in the moderation process.

Learning Outcome 1 (Marking Grid A)

There are several elements to this learning outcome focussing on chemical, physical, mechanical and biological properties along with the structure of materials. Most learners gave detailed or thorough explanations of some of the properties although missing out on commenting upon biological properties. There is also some confusion, in some cases, between physical and mechanical properties. Reference to the specification might be useful here. Most learners were able to access MB2 with some approaching MB3 for this learning outcome.

Learning Outcome 2 (Marking Grid A)

This outcome focuses on the use of science and technology in manufacturing, particularly with regards to increasing production. This learning outcome elicited a wide range of responses all of which were detailed and appropriate. Learners made the link to increased productivity and gave a variety of examples of how technology has facilitated this. The comprehensive nature of the evidence presented allows MB3 to be accessed by the majority of learners.

Learning Outcome 3 (Marking Grid A)

LO3 is split into three sections; the first focus is an investigation of the properties, structures and types of bonding within materials; secondly the production of a secondary material from a primary material and thirdly the health and safety aspects of material testing.

Learners explained a test they carried out and were able to comment upon properties and structures, however the bonding of materials was less well evidenced. They were able to discuss the production of secondary materials from primary materials, including carrying out practical examples. Most approached the health and safety aspect by completing a risk assessment, this assessment does not always follow the normal format, guidance for which is available from the HSE website. Where the standard approach to risk assessment is not used there are elements of the specification that are not well covered because of this. Adopting a best-fit approach to this substantial LO places most learners in MB2 with some approaching MB3.

Learning Outcome 4 (Marking Grid A)

This LO requires the use of calculation and the interpretation of test results. Most learners relied on fairly simple graphs with no calculations presented. Consequently marks were confined to MB1.

Conclusions

The variety of approach taken by some learners shows that the opportunity to develop their own briefs is resulting in useful evidence. Where this is the case care should be taken to ensure that they understand all of the assessment requirements and develop activities to ensure all marks are available to them.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

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