# General Teachers notes:

## An introduction to LMI – general

## Labour Market Information (LMI)

Information about the labour market on a national, regional and local level is the starting point for planning employer engagement but has much broader strategic value in helping schools with curriculum planning, and integrated part of CPD for school staff and governors, information for parents and young people.

- What are the main jobs?
- Who are the main employers?
- What are the main skills?
- Which sectors are growing?
- What is the impact of economic conditions?

Labour market information/intelligence is needed to inform users about economic and labour market conditions, entry requirements, training and skills, salaries, trends and recruitment patterns.

Helping young people find out about the sectors or industry they want to work in is a really important part of career planning.

The modern labour market is complex and constantly changing, making it difficult for people to make sense of what is happening and therefore to make informed decisions about their future.

As part of a programme of careers and enterprise activities LMI is complementary and provides young people with a systemic overview of job opportunities, skills and qualifications needed to access them, trends and career paths.

## Some background reading

(New Anglia http://online.pubhtml5.com/rvmb/dbvb/#p=1) click on the link to read the Norfolk and Suffolk Economic Strategy

Currently, the New Anglia area is the 13th largest sub-regional economy in England, contributing some £35.5bn to UK plc across agriculture, production, manufacturing and services.

It is also the 2nd largest predominantly rural economy, behind only neighbouring Cambridgeshire. If Norfolk and Suffolk were an EU member state, they would still have an economy larger than 16 other member states.

The local economy is growing faster than a number of 'powerhouse' areas, including Greater Manchester and Leeds, as well as established London growth corridors such as Hertfordshire and Coast to Capital. The local economy is also accelerating faster than the national average (excluding London).

## Our business base and its characteristics

Within Norfolk and Suffolk there are currently an estimated 61,000 independent enterprises, with a further 12,000 national and international enterprises operating sites locally (e.g. stores, plants, warehouses etc.)

Of these independent enterprises, 60,300 operate within the private sector. Since 2011, there has been a 'business boom' locally with a net increase of 5,600 private sector enterprises, a boost of 10%, which is some of the fastest growth on record, though remains well behind the 23% increase at the national level.

Of these 60,300 private sector enterprises, some 88% are Micro-sized, meaning there are 53,200 businesses locally that employ between zero and nine people 70.6% of businesses estimated to have no employees at all (other than the owner).

This means that Small and Medium-sized Enterprises (SME's), account for 99.7% of all private sector businesses in Norfolk and Suffolk, in line with the national average.

The fastest growth is in more established enterprises such as those employing upwards of 50 people (increased 14%).

Though this highlights the low, and declining rates of enterprise in the two counties, it could also point to a potentially strong (largely domestic) inward investment offer, with an ever-increasing number of established businesses moving to and operating within Norfolk and Suffolk. This provides an important avenue for job creation, competitiveness and business activity.

Sectorally, growth in active enterprises has been driven almost exclusively by those in services-oriented activities, particularly those most accommodative of self-employment and 'gig' working.

Source: Economic Strategy Evidence Report, 2017

## Did you know?

Manufacturing is one of the largest industries in the region, corresponding to 11.3% of regional GVA in 2015 and 10.2% of UK's manufacturing GVA (UK Office of National Statistics, 2017). In terms of GVA, the most important manufacturing industries in the East of England region are food products and beverages and transport equipment, accounting for 16% and 14.5% respectively of total manufacturing GVA within the region.

The region's strengths are especially concentrated in four strategic sectors: Health and Life Sciences, Agricultural Science and Technology, Information and Communications Technology and Advanced Materials & Manufacturing.

As concerns the Agri-tech sector, the East of England is one of the leading regions in scientific research and the application of relevant knowledge, particularly through the University of Cambridge, the University of East Anglia and a number of world-class institutions such as Rothamsted Research and the John Innes Centre. The region is home to Agritech East, a business-focused cluster organisation that brings together innovative farmers, food producers & processors, scientists, technologists and entrepreneurs with the objective of driving innovation to improve productivity and sustainability of the agriculture sector.

Adastral Park, based in the Suffolk sub-region, is the global R&D centre for BT, which carries out research activity working in photonics and quantum technologies to develop the next generation of faster, higher capacity telecommunications. A hundred other businesses are based there in the Innovation Martlesham technology cluster.

Major microprocessor designers are present in the region, such as ARM Holdings (the world's leading producer of the microprocessors that are found in 95% of smart phones). Furthermore, major ICT innovators are present in the Cambridge cluster, e.g. Apple, Amazon, EE, Fujitsu, Google, Huawei, Microsoft, Nokia, Philips, Qualcomm, and Samsung.

Genomics and regenerative medicine are among the regions' world-class strengths in health and life sciences, along with medical technologies. Global leaders in these sectors, such as GlaxoSmithKline and Astra Zenica have production plants located in the region.

The East of England has considerable strengths also in the aerospace industry, as a wide number of relevant centres are based in the region. Stevenage, in Hertfordshire, is home to MBDA (missiles) and Airbus Defence & Space, that constructs a large proportion of the world's low earth orbit satellites. Moreover, Cranfield University hosts the Aerospace Technology Institute.

The region has considerable strength in automotive design and engineering, e.g. Ford's European design engineering HQ at Dunton in Essex, Nissan Technical Centre Europe (NTCE) at Cranfield, Lotus Cars and Lotus Engineering near Norwich, Caterpillar engines in Peterborough, Ricardo and Cosworth both have electrical systems technical centres in Cambridge.

Strength in sustainable construction arises from BRE, the national Building Research Establishment in Hertfordshire and proximity to some of the world's largest off-shore oil, gas and wind energy sources mean that the eastern counties have substantial strength in the maintenance, repair and operation (MRO) of those facilities.

All of these are supported by excellent capabilities with universities and research and technology organisations such as TWI, which has world-class knowledge and expertise in materials joining and engineering processes as applied in industry.

https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/east-england Source: Economic Strategy Evidence Report, 2017

Also see the LEP Summary
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/483142/LMI_Summary_-_New_Anglia__Final_.pdf

https://newanglia.co.uk/economic-strategy-for-norfolk-and-suffolk/

## The Government's Industrial Strategy – Building a Britain fit for the future

The modern Industrial Strategy has been developed to help businesses to create high quality, well paid jobs right across the country.

It sets out four areas where Britain can lead the global technological revolution. These four Grand Challenges are in:

- Artificial intelligence and big data
- Clean growth
- The future of mobility
- Meeting the needs of an ageing society

These areas have been identified on the advice of leading scientists and technologists. They will be supported by investment from the Industrial Strategy Challenge Fund and matched by commercial investment.

## Key foundations/policies include: -

1. **Ideas: encouraging the UK to be the world's most innovative economy.**
   - Research and Development (R&D) investment raised to 2.4% of GDP by 2027 (including £12.5 billion more public R&D investment by 2021/22)
   - R&D tax credit increased from 11% to 12% in January 2018
   - £725 million over four years invested in Wave 2 of the Industrial Strategy Challenge Fund. This competitive funding programme will address themes related to the Grand Challenges.
2. **People: ensuring good jobs and greater earning power for all.**
   - New technical education system as recommended in the Skills Plan, including 'T Levels' (emphasising technical skills) and apprenticeships
   - Invest £400 million in maths, digital and technical education
   - Create a National Retraining Scheme by the end of the Parliament, including £64 million investment for digital and construction retraining
   - Increase ethnic minority employment and employment of disabled people. Support carers into work.
3. **Infrastructure: driving a major upgrade to the UK's infrastructure.**
   - National Productivity Investment Fund increased to £31 billion by 2022/23 to develop transport, housing and digital (of which £24 billion already allocated)
   - Electric vehicle infrastructure (such as charging points and car grants) investment increased by £100 million
   - Digital infrastructure investment in 5G, rural broadband and data accessibility.
4. **Business environment: guaranteeing the best place to start and grow a business.**
   - Sector deals to help sectors overcome problems specific to their industry
   - Fund more high potential businesses though the British Business Bank, including through the Investment Fund
   - Increase productivity in SMEs by analysing the reasons for variable rates of productivity.
5. **Places: creating prosperous communities across the UK.**
   - Local Industrial Strategies to deliver economic growth across the UK, helping to develop high growth clusters where appropriate
   - Transforming Cities Fund to develop transport links between cities
   - Pilot a Teacher Development Premium that will help develop high-quality teachers in areas with lower performing schools.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

## SIC and SOC --- What are they?

UK Standard Industrial Classification 2007 (UK SIC 2007)

A Standard Industrial Classification (SIC) was first introduced into the UK in 1948 for use in classifying business establishments and other statistical units by the type of economic activity in which they are

engaged.

The classification provides a framework for the collection, tabulation, presentation and analysis of data, and its use promotes uniformity.
In addition, it can be used for administrative purposes and by non-government bodies as a convenient way of classifying industrial activities into a common structure.

The 2010 Standard Occupational Classification (SOC) system is used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of 840 detailed occupations according to their occupational definition. To facilitate classification, detailed occupations are combined to form 461 broad occupations, 97 minor groups, and 23 major groups. Detailed occupations in the SOC with similar job duties, and in some cases skills, education, and/or training, are grouped together

**Industry titles** http://resources.companieshouse.gov.uk/sic/

| | |
|---|---|
| Section A | Agriculture, Forestry and Fishing |
| Section B | Mining and Quarrying |
| Section C | Manufacturing |
| Section D | Electricity, gas, steam and air conditioning supply |
| Section E | Water supply, sewerage, waste management and remediation activities |
| Section F | Construction |
| Section G | Wholesale and retail trade: repair of motor vehicles and motorcycles |
| Section H | Transportation and storage |
| Section I | Accommodation and food services activities |
| Section J | Information and communication |
| Section K | Financial and insurance activities |
| Section L | Real estate activities |
| Section M | Professional, scientific and technical activities |
| Section N | Administrative and support activities |
| Section O | Public administration and defence; compulsory social security |
| Section P | Education |
| Section Q | Human health and social work activities |
| Section R | Arts, entertainment and recreation |
| Section S | Other service activities |
| Section T | Activities of household as employers; undifferentiated goods- and services-producing activities of households for own use |
| Section U | Activities of extraterritorial organisations and bodies |

## Resources

There is a huge amount of information about the labour market available now, but it is important to consider:

- Objectivity - who produced or funded the LMI and are they likely to have an agenda?
- Is it fit for purpose - will it help young people make good career decisions?
- Is it up to date - are there likely to have been changes since the research was completed?
- Geographical basis - will it apply to the young people you are working with?

The source can be a clue to the quality of the information. LMI from established organisations (such as the CBI, TUC or IER) is likely to be valid. Other organisations, such as industry bodies, may have an interest in putting over a particular message. This does not mean the information is not useful, but you need to bear this in mind when using it and, if possible, seek out supporting data.

Here is a selection of some of the key sources:
For teachers and practitioners
Nomis is from the Office for National Statistics and gives access to LMI from government sources. It provides summary data from national to local authority ward level (see below). Data from census returns can also be queried and there is a helpline for users. Using Nomis, you can, for example, find employment by occupational qualifications achieved and compare it with other regions or the UK as a whole.
The profile brings together data from several sources. Details about these and related terminology are given in the definitions section. The link below takes you to selecting local authority and LEP region.

https://www.nomisweb.co.uk/reports/lmp/la/contents.aspx

LMI Future Trends, from the IER National Guidance Research Forum, is aimed at careers guidance practitioners. It covers 25 sectors and includes:

- Regional and national information
- Occupations - salary level and demand
- Equal opportunities issues
- Qualification profiles and training opportunities
- Links to other sources of information
- UKCES (UK Commission for Employment & Skills) was a publicly funded, industry-led organisation that offered guidance on skills and employment issues in the UK. It closed in March 2017 but key reports remain available online and its employer research work will continue and be moved to other government departments. They published many reports including employment projections in Working Futures 2014 to 2024 and Careers of the future

## For young people

icanbea provides information about 24 different sectors with over 400 job roles that include job descriptions, entry requirements, skills required, wages and local where you could work locally

National Careers Service Job Profiles cover almost 800 jobs and include information on entry routes, wages, hours and work activities.

Prospects is a careers website aimed at graduates and undergraduates. It is a good source of LMI, not just for those in higher education, but also for any student considering higher education, including:

• What can I do with my degree • Job sectors with 400+ job profiles including salary, qualifications and skills needed and prospects.

LMI for All is an online data portal, which connects and standardises existing sources of high quality, reliable LMI. LMI for All provides an easily customisable Careerometer widget for websites. The widget can be used to explore and compare key information about occupations to support the process of identifying potential careers.

icould uses the LMI for All data along with personal career stories to help young people explore career routes and pathways. There are over 1,000 different video clips, teaching resources and a helpful careers calendar detailing career-related events around the UK.

## Lesson Plans

### Activities

The activities have suggested times for the steps, however, they can be used in tutor time, careers/PSHE lessons, collapsed timetable events or within some lessons, whilst an age or Year group is suggested, again these too can be adapted.

The activities can be delivered in different ways with a little preparation, such as using the questions as sets of card prompts. Some of the activities will also depend on access to IT.

### Diamond 9

The diamond ranking strategy is an excellent means of encouraging collaboration in the classroom. It also helps students understand text content better and guides teachers in planning based on level of student understanding.

In this strategy, students (paired or grouped) are given an envelope containing a set of statements (usually nine). These statements can also be facts or anecdotes that represent a variety of concepts, opinions and perspectives.

Students are instructed to rank each statement and arrange them in a diamond formation. The criterion for ranking can be simple and general like “importance, relevance, significance” or can be detailed and content specific.

Students must place the statement with the highest priority at the top of the formation and the least important statement at the bottom. The second, third and fourth row consists of statements that are ranked with descending priority, with each row having two, three and two statements respectively.

After completing the task, each group is asked to explain their choice of ranking. The smaller groups can then be combined to form a larger group of six students and instructed to decide on a consensus ranking for the entire set of statements.

Diamond ranking strategy encourages active participation of every student. It helps them to prioritise information, clarify thoughts and enhances their ability to focus, reason and reflect on the information presented. As students are expected to rationalise their choices, presentation and debating skills are facilitated.

Through peer interaction, it targets the facilitation of discussion, sharing information, accommodating perspectives of others, negotiating, and consensus seeking.

## Activity 1 - Suffolk Sectors - Insights into Industry

**Time:** 5-10 mins for both steps 1 &2
20 mins for the Diamond Nine activity
**Age group:** All Key Stages

**Gatsby Benchmark** 2
**CDI Learning outcomes**: 6, 7

Students can:

- describe the organisation, size and structure of different business in the local area
- describe what is meant by the term industry/sector
- explain how work and working life is changing and how this may impact on your own and other people's career satisfaction

**Resources:** Sector cards and 'Diamond nine' grid, Post-its, paper

### Step 1.

Ask students to list the types of businesses or services operating in a 2-5 mile radius of the school

### Step 2.

What do we mean by the term 'industry' / 'sector'? Using paired or table discussion ask students to explore the question. (the question could be put on the board, as part of a PPT or on a card for each table) Feedback/answers could be by using 'Post-it' notes or use another method of collecting the students' thoughts.

### Step 3.

Ask the students to list which are the strong industries/sectors in the Norfolk and Suffolk area. Record their answers. Using a 'Diamond nine' activity hand out the sector cards to the groups.

There are 9 sectors for the groups to choose from. The students need to 'rank' the order as they have discussed with '1' being the strongest and '9' not so strong.

*Answer - energy, ports and logistics, life sciences and biotechnology and information and communications technology.*

Inform them that the following sectors offer major growth potential

*Answer - food, drink and agriculture, tourism, advanced manufacturing, financial services and the digital and cultural creative industries*

Together, the nine sectors account for 37% of employment in the two counties, representing a total of 236,916 jobs at 19,988 businesses. Measures proposed include supporting supply chain development in the energy sector, improving skills provision in agriculture, promoting a life sciences

triangle linking Norwich, Cambridge and Ipswich, and encouraging more cluster development and pilot innovation in advanced manufacturing. (NALEP Sector growth plan)

Supply chain: *Supply chain management (SCM) is the management of the flow of goods and services and includes all processes that transform raw materials into final products. It involves the active streamlining of a business's supply-side activities to maximize customer value and gain a competitive advantage in the marketplace. SCM represents an effort by suppliers to develop and implement supply chains that are as efficient and economical as possible. Supply chains cover everything from production to product development to the information systems needed to direct these undertakings.*

*The supply chain consists of five parts:*

1) *the plan or strategy*
2) *the source (of raw materials or services)*
3) *manufacturing (focused on productivity and efficiency)*
4) *delivery and logistics*
5) *the return system (for defective or unwanted products)*

**Step 4.**

Plenary session. Out of the 9 sectors discussed today which ones appeal to you and why?

## Activity 2 – Suffolk Sectors – An introduction to LMI

Use the teachers' notes (page 1) to introduce the topic.

Labour Market Information or LMI is any quantitative or qualitative data about the nature and operation of the labour market

Two key types of LMI are:

- Quantitative information is usually numerical and based on rigorous research methodologies (eg studies such as the Census of Population)
- Qualitative information is usually extracted from interviews or structured discussions. It can also be anecdotal, coming from sources such as press reports, local employers or personal networks.

Warwick Institute of Employment Research (IER), found that people seeking careers advice want to understand:

- The competition they will face—"How easy is it to get into?"
- Entry and progression routes—"How do I get into it?"
- The rewards available—"What's the pay like?"
- The availability of jobs in their 'travel to work area'—"Can I travel to this work easily?"
- Recruitment and selection and the prospects of securing employment in a particular job—"Could I get into this type of work?"
- The value of particular qualifications, experience or training—"Do employers accept this qualification?"

**Time:** 30-45 mins

**Age Group**: Year 8 upwards and key transition points

**Learning outcomes:**

- To understand the range of opportunities in learning and work locally and regionally
- be able to find relevant labour market information (LMI) and know how to use it in your career planning
- To understand the different qualifications and levels that exist
- To understand how different qualifications might help them in the future
- To identify the best sources of information on qualifications

**Resources:**

- Work & Skills in Suffolk: Information your young people aged 13-19
- Question sheet taken from the Notes pages of the PPT and a preferred way for students to note answers
- Access to
    - **icanbea** https://www.icanbea.org.uk/
    - **The Source** www.thesource.me.uk/
    - **National Careers Service** https://nationalcareersservice.direct.gov.uk/
    - **icould** http://icould.com/

For more information on the routes Post 16 -18: (slide 2)
https://www.gov.uk/courses-qualifications
https://www.gov.uk/what-different-qualification-levels-mean
https://nationalcareersservice.direct.gov.uk/course-directory/home
https://www.ucas.com/file/142366/download?token=R2fL4jzO
https://www.ucas.com/further-education/post-16-qualifications/post-16-qualifications-you-can-take
http://www.parentalguidance.org.uk/making-choices

**Step 1.**

Using the PPT ask them to complete the questions linked to the PPT notes pages. (You may need to show the ppt twice or slides 5-9 again)

**Step 2.**

Ask students to consider

a) What are the key messages?
b) How does this link to their studies/subjects?
c) How can this information be shared with their parents/carers?
d) Where the information could be shared across the school/college

## Activity 3 Jobs in the sector (Construction, Energy, ICT, Financial Services & Public Services)

Each group is given a sector card and students work in groups to create a list of the different jobs available in each of the 9 sectors.

**Time:** 15mins if brainstorming or 30 mins if creating a picture board/ word cloud
**Age group:** Key Stage 3, 4

**Learning outcomes:**

- be able to find relevant labour market information (LMI) and present it in a way to support other students
- to gain an overview of the range of opportunities in a sector
- complete an' interests'/ careers' survey using an online programme and discuss the job and course suggestions with their peers/tutor/adviser/parents.

**Resources:**

- Sector sheet (either uploaded or as a paper exercise) and access to IT and websites to 'drop images into the sheet'
- Local newspapers or materials from skills fairs or talks from local employers can provide useful information
- SACU word cloud my.sacu-student.com, this is a free resource

**Step 1.**
In groups, ask students to list the jobs that can be found in the sector. They could do this using the sheet or by creating a picture board/word cloud.
Use icanbea to source further roles in the sector

**Step 2.**
Could be used as a plenary - How have they arrived at their list?

- They know someone working in the industry
- They have seen the job in action (through a work experience placement, TV programme, local news item, Suffolk Skills Show etc)
- It's something that they are interested in
- They were on the ppt
- Other information

**Step 3.**
Create a sector word cloud

- The picture board could be used for extension work or homework

## Activity 4 - Research Project (Construction, Energy, ICT, Financial Services & Public Services)

**Time:** 1 hour + time for presentation

The research could be completed over a series of tutor periods, a discrete lesson or for homework. You will need to check if the school has the technology to produce podcasts/ webinars.

**Age group:** from Year

**Learning outcomes:**

Students can:

- use comprehensive websites to research local LMI and identify current trends in the local and regional area over the next five years
- identify and evaluate reliable sources of information, advice and support regarding their future education, training and career
- identify the research they need to do into the qualifications or experience necessary for the careers they are interested in

**Resources**: Research sheet and access to IT and websites

## Activity 5 – The Challenge (Construction, Energy, ICT, Financial Services & Public Services)

The Challenge – again these can be delivered in a variety of ways, through the curriculum, as part of 'drop down' days and over a period of 2-4 weeks. See individual challenges.