

# Research Series

# Developing GSE Job Profiles: Interim Report and Initial Validation Study

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### **Contents**

Executive Summary	3
Developing GSE Job Profiles	4
Background	5
The Opportunity	6
GSE Job Profiles	6
Alignment Process	7
GSE Job Profiles and the GSE Teacher Toolkit	11
Next Steps	12
Conclusion	12
References	13
Appendix A: Detailed Mapping for Registered Nurse	14
Validating GSE Job Profiles	21
Purpose of Study	22
Participants	23
Jobs and Industries	24
Job Review	24
Pilot	25
Main Study	25
Analysis	26
Preliminary Findings	27
Findings and next steps	28
Appendix 1	29
Appendix 2	31
References	32

### **Executive summary**

GSE Job Profiles has been created to provide information for teachers of English for Specific Purposes (ESP) on the English language skills needed for specific jobs.

GSE Job Profiles was created using job descriptions from the O\*NET database. Each task in a job description was mapped to Global Scale of English (GSE) Learning Objectives for Professional Learners to identify the linguistic skills that someone would need to master in order to carry out that task in English.

The GSE Job Profiles database can be found on <a href="mailto:english.com/gse">english.com/gse</a> as part of the GSE Teacher Toolkit.

# Developing GSE Job Profiles

### **Background**

English is becoming more important in the global economy, and people learning English for work have different goals from those learning English for general purposes. The Global Scale of English (GSE) Learning Objectives for Professional English were developed by Pearson over a number of years in collaboration with teachers, ELT authors and language experts from around the world. These learning objectives are aimed at learners who are using English for work or professional purposes or are being trained or educated for a profession where English is widely used as a medium of communication.

The GSE Learning Objectives for Professional English were developed with all learners in all fields of professional activity in mind, whatever their level of English and whatever their specialisms. However, while global companies increasingly view English language skill as a core competency for their employees, two recent studies show that specific English needs differ from profession to profession based on a number of factors.

A Cambridge English and QS study, English at Work: global analysis of language skills in the workplace (2016, p.17), found that reading is seen as the most important skill in certain industries (Electronics and High Technology, IT and Computer Services, and Aerospace and Defence), while speaking is more important in others (Travel, Leisure and Hospitality, Transportation and Distribution, Recruitment and HR Services, and Retail). A global survey of employers commissioned by Pearson (2015, N=2,400) found that English skills were seen as either essential or desirable for around 80% of jobs in nine broad categories. However, the proportion regarding English skills as essential ranged quite widely: from 55% for Customer Services down to 35% for Finance. The same survey found that over 60% of employers regarded Listening, Speaking and Reading skills as extremely important or very important even for entry-level roles, while 66% reported significant differences between candidates' selfestimated English skills and their actual skills once they started operating in the role.

The problem is compounded by the fact most recruiters, functional managers, and HR team members do not have the expertise or tools needed to objectively evaluate their employees' relevant English skills, even when senior managers in the company are aware of these variations.

The Global Scale of English (GSE) Learning Objectives for Professional English To download a full copy, visit: english.com/blog/gse-learningobjectives-professional-english

### The Opportunity

Businesses can clearly benefit from a better understanding of the specific English skills required to perform a particular job and the current skill level of those who seek to do that job. Authors, editors and teachers are increasingly aware of the need to be learner-focused and to create syllabuses and courses that reflect learner needs and expectations. While ESP courses have long been in use to help teach language for specific industries, the focus has often been on generic skills that apply to a number of roles within the same industry. If we place the learner at the centre of the learning process, then the most effective way for that learner to reach their goals is to personalise the course to meet their specific needs. There is a need for tools that allow us to create lessons and assessments to address the communicative skills of specific roles within those industries. And with English at Work (Cambridge English, 2016, p.22) reporting a 40% skills gap between the English language skills needed and those available across all companies, including a 25% skills gap among middle and top management, the need for those tools is becoming more critical.

### **GSE Job Profiles**

Pearson has taken a comprehensive approach to the field of ESP by creating an online database that can help teachers and content creators quickly and easily identify the language needs for hundreds of jobs across a variety of industries.

Based on the roles and tasks listed in the U.S. Bureau of Labor Statistics O\*NET jobs database, GSE Job Profiles allows teachers and content creators to find the GSE Learning Objectives that support the development of specific skills for a given job or set of jobs. This can be used to create ESP courses or to identify skills and activities that may be missing from an existing course.

For more information about O\*NET, visit <u>www.onetcenter.org/online.html</u>

### **Alignment Process**

### Occupations and their respective tasks

The goal of the GSE Job Profiles project is to align specific English language learning objectives to the functional tasks associated with specific occupations. The occupations and tasks were taken from the O\*NET database, compiled by the United States Bureau of Labor Statistics (BLS). This database contains more than 1,200 occupations and lists the specific tasks required of someone performing each role. For each occupation, tasks are identified as either Core or Supplemental, depending on the importance and relevance of a task for that occupation. Additionally, O\*NET connects each task to one or more Detailed Work Activities (DWAs). The DWAs are intermediate descriptors that provide information about common work activities across occupations while preserving a level of differentiation that keeps them from appearing too generic.

The tasks and their relative importance for a given job have been determined through extensive ongoing research conducted by that agency. For more information about how the O\*NET database was developed and validated, visit www. onetcenter.org/dataCollection.html

### **Aligning GSE Learning Objectives to tasks**

The mapping of tasks to language skills was conducted by English language learning specialists with ESP experience. Mappers attended an initial training and in addition to a best practices document, they were provided with on-going feedback on the mapping throughout the project. All mapping went through a review stage. This review included comparing tasks associated with the same Detailed Work Activity across different jobs to provide greater consistency.

The tasks for each individual occupation were mapped to one or two GSE Learning Objectives. Some tasks were also associated with Detailed Work Activities. In those cases, a given task could be mapped to additional GSE Learning Objectives.

For example, one of the tasks for the occupation of Registered Nurse is *Monitor, record, and report symptoms or changes in patients' conditions.* This particular task is connected to three Detailed Work Activities: 1) *Inform medical professionals regarding patient conditions and care; 2) Monitor patient conditions during treatments, procedures, or activities; and 3) Record patient medical histories.* Therefore, different GSE learning objectives were needed to match the specific requirements of both the DWA and task together.

Task	Detailed Work Activity	GSE Learning Objective
Monitor, record, and report symptoms or changes	Inform medical professionals regarding patient conditions and care.	Can give a detailed update on a work-related project.
		Can ask open-ended questions to better understand the specific details of a problem.
	Monitor patient conditions during treatments, procedures, or activities.	Can use a variety of reference materials to check factual information quickly and efficiently.
	Record patient medical histories.	Can record the details of project-related actions and results in a log.

While not all tasks were intuitively communicative in nature, most tasks were deemed to require some type of language ability. However, occasionally, a task was deemed to be truly uncommunicative (e.g. Food Service Managers - *Test cooked food by tasting and smelling it to ensure palatability and flavor conformity*). In these cases, the task was considered "not communicative" and was not mapped to any GSE Learning Objectives.

The current phase of the project has resulted in 735 different GSE Learning Objectives being mapped to more than 4,500 tasks across 234 jobs. Repetition of GSE Learning Objectives both within and across jobs was expected. Within jobs, this repetition helps to focus on a set of key skills. Across jobs, it allows for the development of learning content that can be applied across curricula for a variety of jobs, with minor adjustments to address the particular context of a given job. These can be used by learners, teachers and employers to understand the language skills that would allow someone to adequately perform most of the communicative requirements of a job role in English.

### Sample Jobs, with tasks and GSE Learning Objectives

Jobs mapped during this phase of the project covered a variety of industries, including business management and administration, sales, law, information technology, finance, aviation, oil and gas, marketing, medicine, engineering, and hospitality and tourism. Based on market research, key jobs within these fields were prioritised for the first phase of mapping according to the likelihood of the job needing to be performed in English. For example, within the transport industry, pilot and taxi driver were recognised as a higher priority than motorcycle mechanic.

Below are sample mappings of four of the jobs, and some of their related tasks and associate GSE Learning Objectives. For a full example of the registered nurse role, see Appendix A.

### Sample Job #1: Registered Nurse

Detailed Work Activity	Task	GSE Learning Objective	Skill
Assist healthcare practitioners during surgery.	Hand items to surgeons during operations.	Can understand detailed instructions well enough to be able to follow them without making mistakes.	Listening
Supervise patient care personnel.	Direct or supervise less-skilled nursing or healthcare personnel or supervise a particular unit.	Can give a clear, detailed spoken description of how to carry out a procedure.	Speaking
Evaluate patient outcomes to determine effectiveness of treatments.	Modify patient treatment plans as indicated by patients' responses and conditions.	Can ask open-ended questions to better understand the specific details of a problem.	Speaking
Record patient medical histories.	Monitor, record, and report symptoms or changes in patients' conditions.	Can record the details of project- related actions and results in a log.	Writing

## Sample Job #2: Bookkeeping, Accounting, and Auditing Clerks

Detailed Work Activity	Task	GSE Learning Objective	Skill
Calculate financial data.	Debit, credit, and total accounts on computer spreadsheets and databases, using specialized accounting software.	Can complete a form requiring financial information (e.g. application for a bank account or credit agreement).	Writing
Compile data or documentation.	Compile statistical, financial, accounting or auditing reports and tables pertaining to such matters as cash receipts, expenditures, accounts payable and receivable, and profits and losses.	Can write a business report using a standard template.	Writing
Reconcile records of sales or other financial transactions.	Reconcile or note and report discrepancies found in records.	Can identify key details in work- related documents.	Reading
Answer telephones to direct calls or provide information.	Perform general office duties such as filing, answering telephones, and handling routine correspondence.	Can carry out a work-related phone conversation using polite fixed expressions.	Speaking

### Sample Job #3: File Clerk

Detailed Work Activity	Task	GSE Learning Objective	Skill
Read materials to determine needed actions.	Scan or read incoming materials to determine how and where they should be classified or filed.	Can find specific, predictable information in everyday materials (e.g. menus, timetables).	Reading
Provide information to coworkers.	Answer questions about records or files.	Can communicate in routine tasks requiring simple, direct exchanges of information.	Speaking
Provide information to coworkers.	Answer questions about records or files.	Can understand simple work- related questions asked on phone calls.	Listening
Type documents.	Perform general office activities, such as typing, answering telephones, operating office machines, processing mail, or securing confidential materials.	Can understand short, simple personal emails and letters.	Reading

### Sample Job #4: Waiters and Waitresses

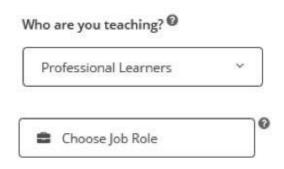
Detailed Work Activity	Task	GSE Learning Objective	Skill
Schedule dining reservations.	Assist host or hostess by answering phones to take reservations or to-go orders, and by greeting, seating, and thanking guests.	Can understand the main information in a simple work-related phone message.	Listening
Clean food service areas.	Clean tables or counters after patrons have finished dining.	Can understand short written notices, signs and instructions with visual support.	Reading
Present food or beverage information or menus to customers.	Inform customers of daily specials.	Can communicate in routine tasks requiring simple, direct exchanges of information.	Speaking
Process customer bills or payments.	Collect payments from customers.	Can ask for and provide everyday goods and services.	Speaking

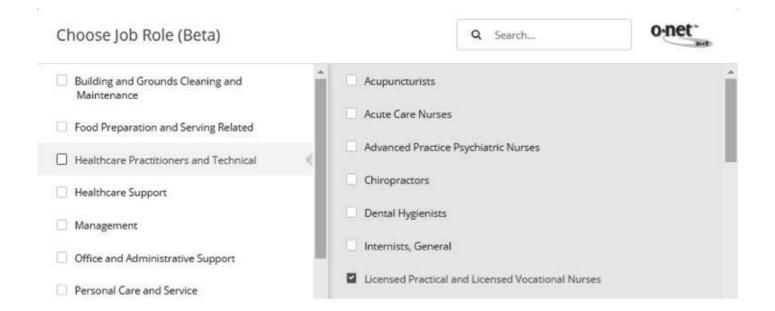
### GSE Job Profiles and the GSE Teacher Toolkit

GSE Jobs Profi le can be accessed via the the GSE Teacher Toolkit, a free online resource to support teaching and lesson planning. To access the GSE Teacher Toolkit, visit english.com/gse/teacher-toolkit.

### **Searching for Job Roles**

- Select 'Professional Learners' from the 'Choose Learner' drop-down
- Click on 'Choose Job Role'
- Browse the list of job families and jobs to find the one you are looking for
- You can also search for a job by typing in the search box
- You can search for a whole job family, e.g. 'Management' or you can narrow down your search to look at specific jobs, e.g. 'Chief Executive' and 'Finance manager"
- You can select two or more categories at the same level, (e.g. Management + Legal [job families] or Chief Executive + Finance manager [jobs])
- When you've chosen a job family or job role role click 'Choose'
- Click 'show results' to see all the GSE Learning Objectives relevant for that job family/job role.





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### **Next Steps**

GSE Job Profiles forms part of an ongoing programme of research. Following the release of this initial set of findings, we will be running validation studies with users and industry specialists to inform future developments and ensure that the data is robust and bringing value to the area of ESP.

If you would like to give feedback on GSE Job Profiles or take part in a case study, we'd love to hear from you. Please get in touch via <a href="https://www.english.com/gse/contact">www.english.com/gse/contact</a>.

### Conclusion

Teachers, employers, employees and job-seekers need better tools to understand the specific communicative language skills needed to perform the tasks required for different jobs across a variety of industries. Most current or prospective employees have limited time to devote to English language learning, so the want to have confidence that the content they learn is targeted to the specific language needs of their respective occupations. Similarly, teachers of ESP who are preparing short courses for their students need access to something that enables them to tailor general materials, selecting only the units or lessons that cover the specified learning objectives.

GSE Job Profiles is a key step in helping to make that information more transparent and accessible to all stakeholders, with the aim of identifying key language requirements and enabling appropriate content to be developed.

## References

Cambridge English Language Assessment (2016) *English at Work: global analysis of language skills in the workplace* <a href="http://englishatwork.cambridgeenglish.org/">http://englishatwork.cambridgeenglish.org/</a>

U.S. Department of Labor, Employment and Training Administration: *O\*NET database*. https://www.onetonline.org/

# Appendix A: Detailed Mapping for Registered Nurse

Detailed Work Activity	Task	GSE Learning Objective	Skill	GSE Level
Immunize patients.	Provide health care, first aid, immunizations, or assistance in convalescence or rehabilitation in locations such as schools, hospitals, or industry.	Can find specific, predictable information in everyday materials (e.g. menus, timetables).	Reading	31
Prepare patients physically for medical procedures.	Prepare patients for and assist with examinations or treatments.	Can communicate in routine tasks requiring simple, direct exchanges of information.	Speaking	36
Test biological specimens to gather information about patient conditions.	Conduct specified laboratory tests.	Can understand rules and regulations (e.g. safety) if expressed in simple language.	Reading	37
Analyze test data or images to inform diagnosis or treatment.	Order, interpret, and evaluate diagnostic tests to identify and assess patient's condition.	Can understand the main information from simple diagrams (e.g. graphs, bar charts).	Reading	42
Assess patient work, living, or social environments.	Assess the needs of individuals, families, or communities, including assessment of individuals' home or work environments, to identify potential health or safety problems.	Can carry out a prepared structured interview with some spontaneous follow-up questions.	Speaking	45
Test biological specimens to gather information about patient conditions.	Conduct specified laboratory tests.	Can understand clearly written, straightforward instructions on how to use a piece of equipment.	Reading	46
Monitor patient conditions during treatments, procedures, or activities.	Administer medications to patients and monitor patients for reactions or side effects.	Can ask closed questions to check facts and details.	Speaking	46
Examine patients to assess general physical condition.	Perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or at disaster site triage centers.	Can ask closed questions to check facts and details.	Speaking	46
Diagnose medical conditions.	Perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or at disaster site triage centers.	Can ask closed questions to check facts and details.	Speaking	46
Administer anesthetics or sedatives to control pain.	Administer local, inhalation, intravenous, or other anesthetics.	Can ask closed questions to check facts and details.	Speaking	46
Administer non- intravenous medications.	Administer medications to patients and monitor patients for reactions or side effects.	Can ask closed questions to check facts and details.	Speaking	46

Immunize patients.	Provide health care, first aid, immunizations, or assistance in convalescence or rehabilitation in locations such as schools, hospitals, or industry.	Can ask closed questions to check facts and details.	Speaking	46
Treat medical emergencies.	Perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or at disaster site triage centers.	Can ask closed questions to check facts and details.	Speaking	46
Treat acute illnesses, infections, or injuries.	Provide health care, first aid, immunizations, or assistance in convalescence or rehabilitation in locations such as schools, hospitals, or industry.	Can ask closed questions to check facts and details.	Speaking	46
Administer anesthetics or sedatives to control pain.	Administer local, inhalation, intravenous, or other anesthetics.	Can briefly give reasons and explanations for opinions, plans and actions.	Speaking	51
Administer non- intravenous medications.	Administer medications to patients and monitor patients for reactions or side effects.	Can briefly give reasons and explanations for opinions, plans and actions.	Speaking	51
Maintain medical facility records.	Maintain accurate, detailed reports and records.	Can write a short report on a work-related task or event.	Writing	51
Administer anesthetics or sedatives to control pain.	Administer local, inhalation, intravenous, or other anesthetics.	Can understand the main information in technical work-related documents.	Reading	53
Administer non- intravenous medications.	Administer medications to patients and monitor patients for reactions or side effects.	Can understand the main information in technical work-related documents.	Reading	53
Order medical diagnostic or clinical tests.	Order, interpret, and evaluate diagnostic tests to identify and assess patient's condition.	Can identify key details in work-related documents.	Reading	55
Communicate health and wellness information to the public.	Instruct individuals, families, or other groups on topics such as health education, disease prevention, or childbirth and develop health improvement programs.	Can explain the main points in an idea or problem with reasonable precision.	Speaking	55
Advise medical personnel regarding healthcare issues.	Direct or coordinate infection control programs, advising or consulting with specified personnel about necessary precautions.	Can write an email, giving details of work-related events, facts, or plans.	Writing	57
Advise communities or institutions regarding health or safety issues.	Consult with institutions or associations regarding issues or concerns relevant to the practice and profession of nursing.	Can write an email, giving details of work-related events, facts, or plans.	Writing	57
Design public or employee health programs.	Work with individuals, groups, or families to plan or implement programs designed to improve the overall health of communities.	Can understand problem and solution relationships in informal conversation.	Listening	58

Collaborate with healthcare professionals to plan or provide treatment.	Consult and coordinate with healthcare team members to assess, plan, implement, or evaluate patient care plans.	Can collate short pieces of information and summarise them for somebody else.	Writing	58
Monitor patient conditions during treatments, procedures, or activities.	Administer medications to patients and monitor patients for reactions or side effects.	Can record the details of project-related actions and results in a log.	Writing	59
Maintain medical facility records.	Maintain accurate, detailed reports and records.	Can record the details of project-related actions and results in a log.	Writing	59
Record patient medical histories.	Monitor, record, and report symptoms or changes in patients' conditions.	Can record the details of project-related actions and results in a log.	Writing	59
Record patient medical histories.	Record patients' medical information and vital signs.	Can record the details of project-related actions and results in a log.	Writing	59
Maintain inventory of medical supplies or equipment.	Prepare rooms, sterile instruments, equipment, or supplies and ensure that stock of supplies is maintained.	Can record the details of project-related actions and results in a log.	Writing	59
Not available	Monitor all aspects of patient care, including diet and physical activity.	Can ask open-ended questions to better understand the specific details of a problem.	Speaking	60
Monitor patient conditions during treatments, procedures, or activities.	Monitor, record, and report symptoms or changes in patients' conditions.	Can ask open-ended questions to better understand the specific details of a problem.	Speaking	60
Evaluate patient outcomes to determine effectiveness of treatments.	Modify patient treatment plans as indicated by patients' responses and conditions.	Can ask open-ended questions to better understand the specific details of a problem.	Speaking	60
Design public or employee health programs.	Work with individuals, groups, or families to plan or implement programs designed to improve the overall health of communities.	Can ask open-ended questions to better understand the specific details of a problem.	Speaking	60
Inform medical professionals regarding patient conditions and care.	Inform physician of patient's condition during anesthesia.	Can pass on a detailed piece of information reliably.	Speaking	60
Collaborate with healthcare professionals to plan or provide treatment.	Consult and coordinate with healthcare team members to assess, plan, implement, or evaluate patient care plans.	Can take part in routine formal discussions conducted in clear standard speech in which factual information is exchanged.	Speaking	60
Communicate health and wellness information to the public.	Instruct individuals, families, or other groups on topics such as health education, disease prevention, or childbirth and develop health improvement programs.	Can justify and sustain views clearly by providing relevant explanations and arguments.	Speaking	60

Treat medical emergencies.	Perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or at disaster site triage centers.	Can ask open-ended questions to better understand the specific details of a problem.	Speaking	60
Direct healthcare delivery programs.	Direct or coordinate infection control programs, advising or consulting with specified personnel about necessary precautions.	Can justify and sustain views clearly by providing relevant explanations and arguments.	Speaking	60
Assist healthcare practitioners during examinations or treatments.	Prepare patients for and assist with examinations or treatments.	Can understand detailed instructions well enough to be able to follow them without making mistakes.	Listening	62
Assist healthcare practitioners during surgery.	Hand items to surgeons during operations.	Can understand detailed instructions well enough to be able to follow them without making mistakes.	Listening	62
Not available	Observe nurses and visit patients to ensure proper nursing care.	Can describe how to do something, giving detailed instructions.	Speaking	62
Design public or employee health programs.	Instruct individuals, families, or other groups on topics such as health education, disease prevention, or childbirth and develop health improvement programs.	Can recommend a course of action, giving reasons.	Speaking	62
Refer patients to other healthcare practitioners or health resources.	Refer students or patients to specialized health resources or community agencies furnishing assistance.	Can recommend a course of action, giving reasons.	Speaking	62
Treat acute illnesses, infections, or injuries.	Provide health care, first aid, immunizations, or assistance in convalescence or rehabilitation in locations such as schools, hospitals, or industry.	Can recommend a course of action, giving reasons.	Speaking	62
Manage healthcare operations.	Perform administrative or managerial functions, such as taking responsibility for a unit's staff, budget, planning, or longrange goals.	Can recommend a course of action, giving reasons.	Speaking	62
Advise medical personnel regarding healthcare issues.	Direct or coordinate infection control programs, advising or consulting with specified personnel about necessary precautions.	Can recommend a course of action, giving reasons.	Speaking	62
Prescribe medications.	Prescribe or recommend drugs, medical devices, or other forms of treatment, such as physical therapy, inhalation therapy, or related therapeutic procedures.	Can recommend a course of action, giving reasons.	Speaking	62

Prescribe assistive medical devices or related treatments.	Prescribe or recommend drugs, medical devices, or other forms of treatment, such as physical therapy, inhalation therapy, or related therapeutic procedures.	Can recommend a course of action, giving reasons.	Speaking	62
Train caregivers or other non-medical personnel.	Provide or arrange for training or instruction of auxiliary personnel or students.	Can give a clear, detailed spoken description of how to carry out a procedure.	Speaking	63
Supervise patient care personnel.	Direct or supervise less-skilled nursing or healthcare personnel or supervise a particular unit.	Can give a clear, detailed spoken description of how to carry out a procedure.	Speaking	63
Direct healthcare delivery programs.	Direct or coordinate infection control programs, advising or consulting with specified personnel about necessary precautions.	Can write clear, detailed instructions about how to complete a familiar work-related task or project.	Writing	64
Monitor patient conditions during treatments, procedures, or activities.	Monitor, record, and report symptoms or changes in patients' conditions.	Can distinguish between fact and opinion in informal discussion at natural speed.	Listening	66
Inform medical professionals regarding patient conditions and care.	Inform physician of patient's condition during anesthesia.	Can outline an issue or problem clearly.	Speaking	66
Advise communities or institutions regarding health or safety issues.	Consult with institutions or associations regarding issues or concerns relevant to the practice and profession of nursing.	Can outline an issue or problem clearly.	Speaking	66
Conduct research to increase knowledge about medical issues.	Engage in research activities related to nursing.	Can write an accurate summary of an essay or article on a familiar topic.	Writing	66
Inform medical professionals regarding patient conditions and care.	Monitor, record, and report symptoms or changes in patients' conditions.	Can give a detailed update on a work-related project.	Speaking	67
Prepare medical supplies or equipment for use.	Prepare rooms, sterile instruments, equipment, or supplies and ensure that stock of supplies is maintained.	Can understand complex technical information such as operating instructions, specifications for familiar products and services.	Reading	68
Supervise patient care personnel.	Direct or supervise less-skilled nursing or healthcare personnel or supervise a particular unit.	Can express varying degrees of certainty about a recommended course of action during a discussion.	Speaking	68
Not available	Monitor all aspects of patient care, including diet and physical activity.	Can use a variety of reference materials to check factual information quickly and efficiently.	Reading	69

Monitor patient conditions during treatments, procedures, or activities.	Monitor, record, and report symptoms or changes in patients' conditions.	Can use a variety of reference materials to check factual information quickly and efficiently.	Reading	69
Evaluate patient outcomes to determine effectiveness of treatments.	Modify patient treatment plans as indicated by patients' responses and conditions.	Can use a variety of reference materials to check factual information quickly and efficiently.	Reading	69
Analyze test data or images to inform diagnosis or treatment.	Order, interpret, and evaluate diagnostic tests to identify and assess patient's condition.	Can use a variety of reference materials to check factual information quickly and efficiently.	Reading	69
Examine patients to assess general physical condition.	Perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or at disaster site triage centers.	Can adjust the precision of questions in order to obtain more detailed information.	Speaking	69
Diagnose medical conditions.	Perform physical examinations, make tentative diagnoses, and treat patients en route to hospitals or at disaster site triage centers.	Can adjust the precision of questions in order to obtain more detailed information.	Speaking	69
Design public or employee health programs.	Instruct individuals, families, or other groups on topics such as health education, disease prevention, or childbirth and develop health improvement programs.	Can write a detailed structured report on work-related topics.	Writing	70
Manage healthcare operations.	Perform administrative or managerial functions, such as taking responsibility for a unit's staff, budget, planning, or longrange goals.	Can write a structured report analysing advantages and disadvantages of a situation and recommending action.	Writing	70
Train caregivers or other non-medical personnel.	Provide or arrange for training or instruction of auxiliary personnel or students.	Can give detailed technical instructions in their field of specialisation.	Speaking	73
Conduct research to increase knowledge about medical issues.	Engage in research activities related to nursing.	Can write essays and reports synthesising information from a number of sources.	Writing	76
Conduct research to increase knowledge about medical issues.	Engage in research activities related to nursing.	Can understand complex arguments in technical journals.	Reading	81

# Validating GSE Job Profiles

### **Purpose of Study**

This study reports on a research project to validate the accuracy of the mapping of GSE Learning Objectives (LOs) to O\*NET tasks for specific jobs which was originally completed by a small group of freelance editors to create the GSE Job Profiles database. The following goals for the study were established:

- Determine whether the specific GSE LOs mapped to jobspecific tasks would be considered appropriate language skills by a significant majority of English for Specific Purpose (ESP) teachers who teach or write materials for English skills related to specific job industries.
- Identify if there are some industries or jobs that include tasks which may not be defined in a way that allows them to be effectively mapped to language skills.
- Identify specific tasks where the language skills were not considered appropriate by a significant percentage of reviewers and may need to be re-evaluated.

### **Participants**

Participants were chosen from the Pearson database of teachers with experience of teaching English for Business as well as the pool of raters that had been involved in the rating of GSE Learning Objectives for Professional English over the last three years. For more information on the project to rate GSE Learning Objectives, download the full report at english.com/gse.

Each of the candidates was initially sent a screener to gauge familiarity with each of the job industries to be included in the study. The industries selected for this validation study were: Accounting and Finance; Hospitality and Tourism; Engineering and IT; Sales and Marketing; and Healthcare.

Candidates were asked to rate their ESP experience with each industry on a scale of 1 to 5, 1 being very familiar and 5 being very unfamiliar. Any candidate who ranked their familiarity as 1, 2, or 3 was eligible to review the jobs for that industry. Candidates were eligible to review two jobs for each industry with which they had sufficient familiarity, with no candidate reviewing more than 6 jobs in total.

44 candidates completed the screener. Of those, 41 were eligible to review jobs in at least one industry, with 29 candidates eligible to review the maximum number of 2 jobs in each of 3 categories. Due to availability of raters and the timeframe of the study, some raters who would have been eligible to review 6 jobs were only available or willing to review a smaller set.

### Jobs and Industries

The scope of this validation study was partly determined by the availability of the reviewers. It was determined that we needed at least 12 participants to review each of the jobs so that, based on attrition or errors, we would have at least 10 responses per job for the final analysis. As a result of reviewer availability, we decided to review three jobs in each of the five industries. This required 180 surveys to be completed. The final lists of jobs that were reviewed is shown below:

### Industries and Jobs reviewed

Industry	Jobs
Accounting and Finance	<ul><li>Bookkeeping, Accounting, and Auditing Clerks</li><li>Accountants</li><li>Financial Analysts</li></ul>
Sales & Marketing	<ul> <li>Retail Salespersons</li> <li>Marketing Managers</li> <li>Advertising Sales Agents</li> </ul>
Hospitality and Tourism	<ul><li>Tour Guides and Escorts</li><li>Waiters and Waitresses</li><li>Lodging Managers</li></ul>
Healthcare	<ul> <li>Dental Hygienists</li> <li>Licensed Practical and Vocational Nurses</li> <li>Family and General Practitioners</li> </ul>
Engineering and IT	<ul> <li>Computer Network Support Specialists</li> <li>Information Technology Project Managers</li> <li>Software Developers - Applications</li> </ul>

### **Job Review**

A survey was created for each of the 15 jobs listed above. Each survey contained 28-57 pairs of job tasks and their related GSE Learning Objectives (LOs) for Professional English. Most tasks had two LOs that had been mapped to them.

For each task, raters were asked to choose whether the GSE LO(s) that had been mapped were *Appropriate* or *Not Appropriate*. Raters could also choose *Don't know*. If a Learning Objective was rated as *Not appropriate*, the rater was asked to provide an explanation for that rating.

### **Pilot**

An in-house pilot study was conducted with two jobs (Accountant, Licensed Vocational and Practical Nurse) each of which was reviewed by 3-5 Pearson curriculum developers who had familiarity with the respective industries. The pilot was intended to check that the instructions and methodology were sound before launching the full study.

### **Main Study**

Modifications were made to the briefing documents, following feedback from participants in the pilot study. The main study was then carried out as follows:

- 15 jobs were identified across 5 industries (Accounting and Finance; Hospitality and Tourism; Engineering and IT, Sales and Marketing; and Healthcare). These 15 jobs were chosen to cover a range of professional levels and job tasks.
- Those interested in taking part in the study were sent a screening questionnaire to complete (see Appendix 1). As part of this questionnaire, they were asked to rate their familiarity with the 5 job industries, on a scale of 1-5.
- Questionnaire responses were analysed to ensure all raters only received surveys for those jobs with which they were familiar (1-3 on the survey). The minimum requirement was set at 12 respondents per job survey to ensure a minimum of 10 survey responses per job (once errors/incomplete surveys had been removed). The final number of surveys sent out per iob was between 13-16.
- Instructions (see Appendix 2) were sent to raters along with a personalised link to Survey Monkey and the jobs they were being asked to rate (in line with their experience). Each job listed job tasks along with the GSE Learning Objectives that were mapped to each of those tasks. On completion of the ratings survey, raters were paid £10 per survey.
- 89% of all surveys were completed in full (187 out of 210).
- Responses were collated and analyzed (see next section).

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### **Analysis**

Each survey was analyzed independently using the same methodology. The number of reviews for each survey ranged from 11 to 16, achieving the threshold of at least 10 reviews per survey. For each task, a level of agreement with the associated Learning Objective(s) was calculated by dividing the number of *Appropriate* ratings by the the total ratings (i.e. *Appropriate* ratings + *Not appropriate* ratings). Any ratings of *Don't know* were excluded from the total ratings.

Ahead of the analysis, it was determined that a level of agreement of 80% or higher would indicate that the Learning Objective mapped to a given task was appropriate. This is the same threshold figure used in the original rating of GSE Learning Objectives. Similarly, an average level of agreement of 80% or higher across all reviews for a given job would indicate that the Learning Objectives associated with that job provided an appropriate representation of the language skills needed to adequately perform that job in English.

### **Preliminary Findings**

Level of appropriacy across tasks by job: As noted above, it was determined that a level of agreement of 80% or higher would indicate that the Learning Objectives mapped to the tasks for these jobs were appropriate. All jobs included in this study received a level of agreement of at least 80% across all of the reviews of "task/GSE Learning Objective" pairs. Furthermore, the majority of jobs (12 out of 15) received an overall level of agreement of 90% or higher. The highest levels of agreement were seen for Software Developer - Applications (97%), Marketing Managers (97%), and Financial Analysts (97%), whilst the lowest level of agreement was seen for Accountants (87%) and Computer Support Network Specialists (87%). Even the jobs with the lowest overall level of agreement were still well above the minimum threshold of 80% agreement.

Industry	Job	Overall agreement - All Tasks/GSE Pairs (%)	Raters (#)	
	Bookkeeping, Accounting, and Auditing Clerks	96%	13	
Accounting and Finance	Accountants	87%	13	
	Financial Analysts	97%	12	
	Retail Salespersons	95%	12	
Sales and Marketing	Marketing Managers	97%	12	
	Advertising Sales Agents	95%	12	
	Tour Guides and Escorts	89%	11	
Hospitality and Tourism	Waiters and Waitresses	92%	14	
	Lodging Managers	95%	11	
	Dental Hygienists	91%	16	
Healthcare	Licensed Practical and Vocational Nurses	95%	13	
	Family and General Practitioners	95%	12	
Engineering and Information Technology	Computer Network Support Specialists	87%	13	
	Information Technology Project Managers	96%	12	
	Software Developers - Applications	97%	14	

Level of appropriacy within tasks: Analysis was also carried out into the level of agreement within each "task/ GSE Learning Objective" pair. Of the 630 pairs that were reviewed, 93% had a level of agreement above 80%; in the remaining cases, the level of agreement was 70% or higher.

For a majority of the jobs reviewed, a level of agreement exceeding 80% occurred in over 90% of all their "task/GSE Learning Objective" pairs. Four jobs had 100% of "task/GSE Learning Objective" pairs with a level of agreement 80% or higher - Financial Analysts, Lodging Managers, Family and General Practitioners, Information Technology Project Managers.

Industry	Job	Task/LO pairs with 80+% agreement		
		(#)	% of all pairs	
	Bookkeeping, Accounting, and Auditing Clerks	51	96%	
Accounting and Finance	Accountants	27	75%	
	Financial Analysts		100%	
Sales and Marketing	Retail Salespersons	36	92%	
	Marketing Managers	44	96%	
	Advertising Sales Agents	35	92%	
	Tour Guides and Escorts	31	86%	
Hospitality and Tourism	Waiters and Waitresses	37	84%	
	Lodging Managers	55	100%	
	Dental Hygienists	35	92%	
Healthcare	Licensed Practical and Vocational Nurses	49	98%	
	Family and General Practitioners	38	100%	
Engineering and Information Technology	Computer Network Support Specialists	36	82%	
	Information Technology Project Managers	50	100%	
	Software Developers - Applications	35	97%	

### Findings and next steps

The current study has demonstrated that the overall methodology for mapping GSE Learning Objectives to job tasks provides a useful representation of the key language skills required for these jobs, according to teachers and materials writers. We are currently reviewing all of the comments that were provided for any "task/GSE Learning" Objective" pair that was considered Not appropriate and editing the database as appropriate. Analysis of these findings will inform the mapping of additional jobs in the future.

As a follow-up to this teacher validation study, we will be carrying out additional studies with industry experts and people employed in these roles who use English as a second or other language.

### Appendix 1

### **GSE Job Profiles Screening**

Dear Teacher,

As part of a Pearson project to understand the language skills needed to perform specific jobs, we are looking to recruit English for Specific Purposes teachers and content developers to participate in a paid survey in late July to mid-August.

The task involves evaluating whether certain learning objectives are appropriate for specific activities associated with a given job.

You will be paid £10 (or equivalent) for each survey. Participants will be asked to complete 2 to 6 surveys across different jobs.

There are a limited number of places available, so if you are interested in applying to take part, please complete this questionnaire by Thursday 20th July for consideration. We will contact you by the beginning of August to let you know if you have been selected.

Thank you,

Global Scale of English (GSE) team

- 1. Full name:
- 2. Email address:
- 3. Are you available during the period listed above?
- Yes
- · No
- 4. Experience teaching or writing English for Specific Purposes (ESP) content in any field:
- Yes
- No
- · Don't know

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5. Familiarity with language for jobs in the following industries (rate 1-5, with 1 being very familiar and 5 being very unfamiliar):

<ul> <li>Healthcare</li> </ul>	1	2	3	4	5
<ul> <li>Accounting</li> </ul>	1	2	3	4	5
<ul> <li>Hospitality &amp; Tourism</li> </ul>	1	2	3	4	5
• Engineering & IT	1	2	3	4	5
<ul> <li>Sales &amp; Marketing</li> </ul>	1	2	3	4	5

6. How many surveys would you be interested in completing?

- 2
- 3
- 4
- 5
- 6

### Appendix 2

### **Covering letter**

Dear Job Profiles Rater,

Thank you for offering to help to validate the Pearson English GSE Job profiles. According to the selections you made in the screening questionnaire, we have selected the number of job surveys you said you would be able to complete, and in the domains with which you are most familiar.

Each survey contains a list of the tasks associated with the job in question, and the Learning Objectives ('Can Do statements') mapped to each task. You will have to decide whether the selected Learning Objectives are appropriate for each job task, and if you do not think so, to indicate briefly why not.

You will find separate links to each of your allocated surveys (one per job) below. Each questionnaire will take from 10 to 20 minutes. Please complete each survey at one sitting; note that every question requires an answer.

Survey: Dental Hygienist

Survey: Family and General Practitioners

Survey: Licensed Practical and Vocational Nurse

Survey: Bookkeeping, Accounting, and Auditing Clerks

Survey: Accountant

Survey: Financial Analysts

Survey: Computer Network Support Specialist

Survey: Information Technology Project Managers

Survey: Software Developers, Applications

Survey: Waiters and Waitresses

Survey: Tour Guides and Escorts

Survey: Lodging Managers

Survey: Retail Salesperson

Survey: Advertising Sales Agents

Survey: Marketing Manager

Thank you,

Global Scale of English (GSE) team

## References

De Jong, J.H.A.L., Mayor, M. and Hayes, C. (2016) Developing Global Scale of English Learning Objectives aligned to the Common European Framework. Available at https://www.english.com/gse/researchers

# Be yourself in English.

