

EXHIBIT 4.5 Knowledges Contained in O*NET

- Business and management
 - Administration and management
 - Clerical
 - Economics and accounting
 - Sales and marketing
 - Customer and personal service
 - Personnel and human resources
- Manufacturing and production
 - Production and processing
 - Food production
- Engineering and technology
 - Computers and electronics
 - Engineering and technology
 - Design
 - Building and construction
 - Mechanical
- Mathematics and science
 - Mathematics
 - Physics
 - Chemistry
 - Biology
 - Psychology
 - Sociology and anthropology
 - Geography
- Health services
 - Medicine and dentistry
 - Therapy and counseling
- Education and training
 - Education and training
- Arts and humanities
 - English language
 - Foreign language
 - Fine arts
 - History and archaeology
 - Philosophy and theology
- Law and public safety
 - Public safety and security
 - Law, government, and jurisprudence
- Communications
 - Telecommunications
 - Communications and media
- Transportation
 - Transportation

SOURCE: Adapted from National Center for O*NET Development, "The O*NET Content Model" (www.onetcenter.org/content.html#cm6), accessed 8/29/13.

O*NET identifies and defines 42 skills applicable across the occupational spectrum. Exhibit 4.6 lists these skills. The first 10 are basic skills involving acquiring and conveying information; the remaining 32 are cross-functional skills used to facilitate task performance.

Ability. An ability is an underlying, enduring trait of the person that is useful for learning about and performing a range of tasks. It differs from a skill in that it is less likely to change over time and that it is applicable across a wide set of tasks encountered in many different jobs. One can think of ability as the underlying personal characteristics that determine how quickly one can acquire and to what degree one can master the knowledge and skills required for a job.¹⁵ Four general categories of abilities are commonly recognized: cognitive, psychomotor, physical, and sensory. O*NET contains a complete taxonomy of these four categories, shown in Exhibit 4.7.