Comparisons of Job Characteristics

Focus Occupation: Engineering Teachers, Postsecondary (25-1032)
Associated Occupation: Agricultural Sciences Teachers, Postsecondary (25-1041)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 54

Focus Occupation: Engineering Teachers, Postsecondary (25-1032)
Associated Occupation: Agricultural Sciences Teachers, Postsecondary (25-1041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Education and Training	9.2	20.3	21.3	0	Current knowledge level may be sufficient
English Language	11.2	17.9	21.4	>>	Current knowledge level is likely more than sufficient
Biology	3.7	15.6	6.7	<<	Extensive education and/or training may be required
Communications and Media	5.3	11.2	10.5	0	Current knowledge level may be sufficient
Chemistry	4.8	11.1	10.8	0	Current knowledge level may be sufficient
Food Production	2.1	9.9	1.7	<<	Extensive education and/or training may be required
Personnel and Human Resources	5.6	9.5	7.9	<	Expanded education and/or training may be required
Geography	3.9	9.0	4.0	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Engineering Teachers, Postsecondary (25-1032)
Associated Occupation: Agricultural Sciences Teachers, Postsecondary (25-1041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Speaking	10.8	18.7	14.8	<<	Extensive development of skills in this area may be required
Instructing	7.8	17.3	15.5	<	A higher skill level may be required
Reading Comprehension	10.7	17.0	14.1	<	A higher skill level may be required

Writing	9.2	16.7	13.1	<<	Extensive development of skills in this area may be required
Active Listening	11.0	14.4	13.0	<	A higher skill level may be required
Critical Thinking	10.8	14.2	12.6	<	A higher skill level may be required
Active Learning	8.7	13.9	11.7	<	A higher skill level may be required
Learning Strategies	7.2	13.9	11.8	<	A higher skill level may be required
Monitoring	9.9	13.0	12.3	0	Current skill level may be sufficient
Time Management	8.9	12.9	9.3	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	12.2	10.2	<	A higher skill level may be required
Science	4.5	10.2	8.9	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 92

Focus Occupation: Engineering Teachers, Postsecondary (25-1032)
Associated Occupation: Agricultural Sciences Teachers, Postsecondary (25-1041)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Expression	12.4	20.1	18.1	<	Some improvement in abilities may be required
Speech Clarity	10.2	19.0	14.9	<<	Extensive improvement in abilities may be required
Oral Comprehension	12.5	18.3	16.3	<	Some improvement in abilities may be required
Written Expression	9.8	18.2	14.9	<	Some improvement in abilities may be required
Written Comprehension	11.0	17.9	16.6	0	Current ability level may be sufficient
Deductive Reasoning	10.6	13.5	12.1	<	Some improvement in abilities may be required
Inductive Reasoning	10.2	13.5	12.6	0	Current ability level may be sufficient
Speech Recognition	9.9	12.5	12.1	0	Current ability level may be sufficient
Memorization	5.6	7.9	8.3	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Engineering Teachers, Postsecondary (25-1032)
Associated Occupation: Agricultural Sciences Teachers, Postsecondary (25-1041)

Work Activities	Exclusivity of Activity
Advise governmental or industrial personnel	28
Advise students	49

Collect academic research data	62
Compile bibliographies of specialized materials	54
Conduct research on work-related topics	44
Convert information into instructional program	38
Design classroom presentations	45
Develop course or training objectives	42
Develop instructional materials	38
Direct and coordinate scientific research or investigative studies	27
Encourage group participation	54
Evaluate student performance	46
Maintain educational records, reports, or files	43
Make education presentations	46
Organize educational material or ideas	41
Prepare educational reports	44
Record student progress	46
Teach college level courses	54
Use computers to enter, access or retrieve educational data	46
Use library or online Internet research techniques	21
Use oral or written communication techniques	1
Use public speaking techniques	13
Use teaching techniques	29
Write research or project grant proposals	33
Write scholarly or technical research papers	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: n/a

Focus Occupation: Engineering Teachers, Postsecondary (25-1032)
Associated Occupation: Agricultural Sciences Teachers, Postsecondary (25-1041)

Tools and Technologies	Exclusivity
Tools and technology data is unavailable for one or both occupations.	

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.