

Tulosten esittämisestä

Graduryhmä / Leena Hiltunen
8.4.2009

JYVÄSKYLÄN YLIOPISTO

Tulosten esittämisestä

- Pelkkä kyselyn tai opetuskokeilun tulosten esittäminen ei riitä
- Gradun tulososiossa tulee olla tarkempaa analyysiä, kuin vain jakaumia vastauksista

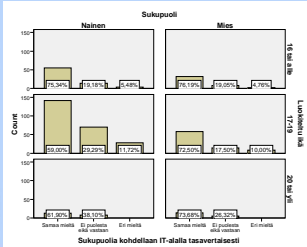
JYVÄSKYLÄN YLIOPISTO

Ikäjakauma

Mitä kuviosta voidaan päätellä?
Onko kuvio oleellinen?

JYVÄSKYLÄN YLIOPISTO

Sukupuoli, ikä ja kohtelu IT-alalla ristiintaulukoituna



Mitä kuviosta voidaan päätellä?
Onko kuvio oleellinen?

JYVÄSKYLÄN YLIOPISTO

Ristiintaulukoinnin tulokset taulukossa

		Koen olevani tietokone asiantuntijaksi			Total
		Samaa mieltä	Ei puolesta eikä vastaan	Eri mieltä	
Koksin oloni kotona IT-alalla	Lkm	75	30	35	140
	%	55,1%	30,0%	15,2%	30,0%
Ei puolesta eikä vastaan	Lkm	28	40	44	112
	%	20,6%	40,0%	19,0%	24,0%
Eri mieltä	Lkm	33	30	152	215
	%	24,3%	30,0%	65,8%	46,0%
Total	Lkm	136	100	231	467
	%	100,0%	100,0%	100,0%	100,0%

Mitä kuviosta voidaan päätellä?
Onko kuvio oleellinen?

JYVÄSKYLÄN YLIOPISTO

Yhteenvetoja

Eri vastaajaryhmien koonti

	Materiaalinjakajat (MJ)	Monimuoto-opettajat (MMO)	Verkko-opettajat (VO)
Lukumäärällisesti	15	31	19
Prosentuaalisesti	31 %	65 %	40 %

Eri kysymysten koonti

	Keskiarvo asennoltumis	Keskijointa asennoltumis	Keskiarvo toteutum	Keskijointa toteutumas
MJ	4,02 ^a	0,72 ^a	3,43 ^a	1,03 ^a
MMO	4,10	0,72	3,71	0,96
VO	4,30	0,59	3,76	0,90
Yhteensä	4,12	0,77	3,64	0,98

JYVÄSKYLÄN YLIOPISTO

Category and frequency of responses

What was useful about the Integrated mode of skill acquisition
 combined theoretical and practical (theory applied practically and realistically) (24)
 learning from experts on the job (7)
 relevant to work skills/ applicable/ specific (7)
 on-going development of skills/ upgrading (6)
 apprenticeship important initially but e-j is essential (4)
 grounding in basics (transferable skills) (4)
 hands-on experience (4)
 good educators/ trainers (4)
 appropriate background knowledge/ theoretical base (2)
 up to date methods - first hand experience (1)
 practical experience more important than theory (1)

What was useful about the Formal pre-employment mode of skill acquisition
 appropriate background knowledge/ theoretical base (10)
 combined theoretical and practical (theory applied practically and realistically) (6)
 relevant to work skills/ applicable/ specific (2)
 grounding in basics (transferable skills) (1)
 good educators/ trainers (1)
 share experiences - learn from others (1)
 hands-on experience (0)

What was useful about on-the-job mode of skill acquisition
 hands-on experience (79)
 relevant to work skills/ applicable/ specific (27)
 learning from experts on the job (20)
 practical experience more important than theory (7)
 up to date methods - first hand experience (4)
 you get paid while you learn (3)
 on-going development of skills/ upgrading (2)

What was useful about school followed by on-the-job mode of skill acquisition
 school basics, then e-j and learning from others (5)
 learning from experts on the job (1)
 grounding in basics (transferable skills) (1)
 hands-on experience (1)

Laadullinen aineisto
määrällisessä muodossa
Case: Työssäoppimisen muodot

Tables capturing key trends

	Integrated	Formal pre-employment	On-the-job	School
Initial	67 or 27%	23 or 9%	148 or 59%	8 or 3.2%
Final	73 or 32%	19 or 8.1%	138 or 59%	2 or 0.8%

How could the on-the-job mode of skills acquisition be improved?
 longer e-j time and follow-up (24)
 no improvement (18)
 more time with expert on the job (16)
 more detailed/ advanced special courses when required (13)
 formalisation of e-j and skills development (11)
 more group sharing of skills/ ideas (7)
 more up to date theory provided/ background knowledge (7)
 text to support/ complement e-j (5)
 better trainers - capable/qualified/ up to date (5)
 on-going refresher courses for staff and trainers (4)
 more specific e-j - including vendor training (3)
 better communication between management/ staff re staff's training needs (3)
 more motivation and incentive to learn/improve/achieve (2)
 better resources (2)
 more varied work experience (2)
 job training off-site (1)
 improved e-j and personnel exchange/rotation (1)
 keep up with modern technological changes (1)
 standardised criteria/ expectations for trainee/ profession (1)
 cater for individual differences and capabilities (1)

JYVÄSKYLÄN YLIOPISTO

Esimerkki analysoinnista
Case: Työssäoppimisen menetelmien hyödyllisyys

Eri työpaikat A-E
 Eri vastaajat 1-27
 d=daily
 w=weekly
 m=monthly

Kaksi korkeinta arvoa
 lihavoitu; kaksi alinta
 arvoa allivertailtu

Utility of learning curriculum								Utility of strategy and frequency of use									
Subj.	Mentor	Everyday activ.	Obak Learn ment.	Obak Learn oth.	Work place	Others	Questioning	Coaching	Analogies	Diagrams	Modeling						
A1	3	8	1	4	7	2	2-w1m3	2	2	2	6						
A2	7	11	9	9	6	7	7-d2w2	6-d1w2m1	2-w2m1	1	2-w3m1						
A3	10	12	11	2	8	8	9-m1w3	10-d2w2	2-w1m3	9-m4	11-d4						
A4	10	10	7	5	9	7	9-d3e1	10-d4	7-w3d1	1-w4	9-w1d2m1						
A5	11	12	8	7	9	7	10-d4	6-w2m1d1	2-m2	1-m1w1	1-m2w1						
A6	9	10	2	11	10	8	7-d3e1	9-d1w3	2-w3m1	2-w1m2	7-w3m1						
Bv	7	11	3	2	8	5	3-w4	3-w3	1	2-w1m1	1-w3						
B8	7	12	6	10	8	12	7-d2w2	2-m1	6-w1m1	2	5-m2						
B10	5	4	3	7	4	5	6-m1w1d1	2-m1w2	3-m1w1d1	1-m1w2	5-w2						
C11	2	8	2	8	7	9	2	2	2	2	2						

Yleisesti korkeimmat arvot (green box)
 Yleisesti alimmat arvot (red box)

JYVÄSKYLÄN YLIOPISTO

Laadullinen aineisto taulukkona
Case: Eri menetelmien hyödyllisyys ongelmanratkaisussa

Table 9 Frequency of 7+ when learning aids are reported as being most useful in developing diff knowledge types¹

Learning Aids	Propositional Knowledge ²	Procedural Knowledge ³	Dispositional Knowledge ⁴
Learning guides	1	3	0
Mentors	2	5	0
Instruction	2	7	2
Everyday Activities	2	13	5
Observing & Listening	2	15	5
Other workers	2	11	5
Workplace	2	3	6
Action Thinking	0	3	0

note:
 1. Frequency of item scoring 4 or 5 = 2
 2. Maximum possible for Propositional Knowledge = 7
 3. Maximum possible for Procedural Knowledge = 16
 4. Maximum possible for Dispositional Knowledge = 7

Eri tietämystyyppöjä

JYVÄSKYLÄN YLIOPISTO



Tulosten esittämisestä

Leena.r.k.Hiltunen@ju.fi

JYVÄSKYLÄN YLIOPISTO
