*Authors: Steven Bloch and Michael Clarke*

**Final report Work package 3**
***Project deliverable KPT-WP3***

Education and Culture
Leonardo da Vinci

# Training Needs Analysis

## WP 3 deliverable
## June 2006



 

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**EXECUTIVE SUMMARY**

This training needs analysis presents an investigation into the assistive technology training needs for professionals who work with people with disabilities but who are not themselves AT specialists.

Drawing on existing research and models, the analysis identifies professionals within three key groups: clinical, technical and social/administrative. Professionals within these groups were selected to represent the areas of AAC, environmental control and computer access in the areas of home, work, vocational/educational, community/leisure and medical settings. Research participants were identified across the partner countries with reference to their relationship to AT centres and/or their known input to AAC services within each country.

A questionnaire was designed to explore participants' perceived training needs and preferences for future training. In total 135 questionnaires were completed for this study.

A high proportion of respondents reported no pre-qualification learning in AT but also indicated a desire to develop knowledge and skills in this area. Respondents identified that keeping pace with new developments in AT technology and increased demand for AT were the most significant challenges to their current work that may imply a training need.

Based on the findings reported in this analysis it is recommended that generic training guidelines for AT can be developed for professionals across Europe and that these should support the needs of professionals working in multiple environments and in multi-professional teams. Also, that the topic areas of cognition, assessment, outcome measurement and functional use of AT should be emphasised in training. It is concluded that whilst an emphasis on face-to face training is preferred, training providers may also seek to develop flexible modes of delivery.

 

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## INTRODUCTION

The aim of the Keeping Pace with (Assistive) Technology project is to meet the life-long learning needs of professionals working with people with disabilities in Health Services, Social Services and Vocational Training. Work Package 3 (WP3) forms part of a broader set of work packages concerned with understanding training provision, legislative and policy influences and professionals' perceived training needs in the partner regions. This report presents findings from the WP3 training needs analysis. Recommendations that are of relevance to the development of guidelines are also presented.

## AIMS

The central aim of WP3 concerns identifying assistive technology (AT) training needs for the target audience/group. In its broadest sense the WP3 target audience are professionals who work with people with disabilities but who are not AT specialists.

## OBJECTIVES

The work package objectives are to:

1. establish a comprehensive understanding of the target audience community in partner regions;
2. identify and agree the target group(s) for the training needs analysis (TNA) within partner regions;
3. design and implement an analysis of training needs questionnaire;
4. analyse and document perceived training needs.

## BACKGROUND

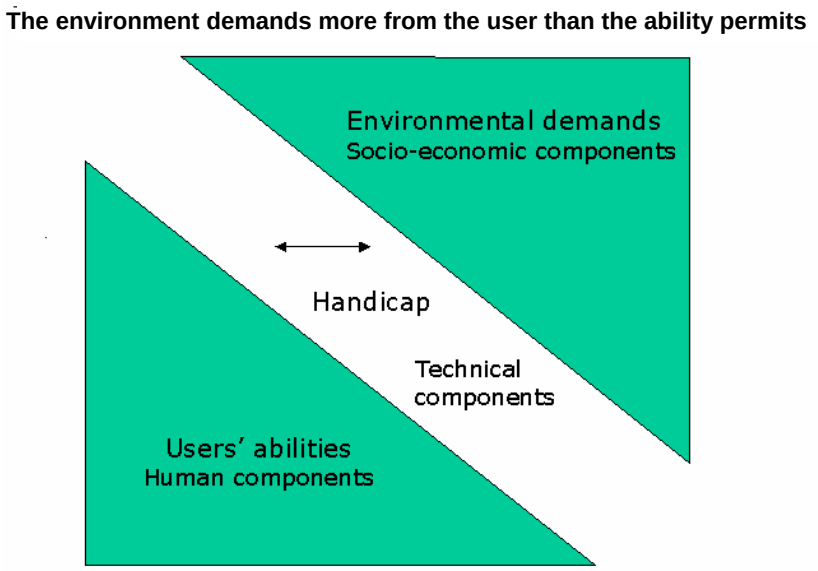
The identification of the target audience for WP3 and the development of the training needs survey has been informed by the work of the HEART Line E project (1995), TELEMATE project (1999) and EUSTAT project (1999). Principle elements of these works that are of particular relevance to WP3 are set out below. The WP3 report is not intended as a comprehensive review of these works. For this the reader is directed to the texts from which the information is drawn.

### Theoretical Backgrounds

As an element of the TIDE programme for AT training for professionals, the HEART Line E project produced a framework for AT training developed from early World Health Organisation (WHO) International Classification of Impairments, Disabilities and Handicaps (ICIDH).

The model is founded on the proposition that AT has the potential to bridge the gap between the individuals' abilities and environmental demands. This framework is illustrated in figure 1 below.

Figure 1: Adapted version of the HEART framework




According to this HEART Line E project model, handicap is represented as the gap between environmental demands and the individuals' abilities (human components). This is understood to diminish through changes in the individual and/or socio-economic environment, and involves the introduction of technical components. Technical components are categorised into four domains: communication, mobility, manipulation and orientation. The HEART Line E project proposes that models of AT education and training reflects the three core components of its model: human components, environmental demands and technical components. Subsequently, the ICIDH classification has been developed and a new international classification of functioning, disability and health proposed (WHO, 2001). The new model promotes the significance of components of human functioning across the lifespan. Of particular relevance to KPT and the models of AT reviewed here are the ICF components of body structure and function, activity and participation.

The TELEMATE project aimed, in part, to: "*create an appropriate framework for a curriculum in AT that can be maintained and developed as the field develops*" (TELEMATE Curriculum Framework, 1999, page 6), with a focus on the development of tertiary-level, post-secondary education opportunities for professionals specialising in AT. The EUSTAT project targeted training opportunities for AT users and their immediate support networks such as family members and personal assistants.

**Target audience community in partner regions**

An outcome of the TELEMATE project that is relevant to the first objective of WP3, (to establish a comprehensive understanding of the target audience community in partner regions), was the development of an academic background guide (TELEMATE, 1999). The guide provides a picture of the professional mix and level of qualification of those working in

the field of AT. The model proposes that professionals involved in AT can be located within three broad educational backgrounds: clinical, technical and social / administrative. Clinical professions include for example, physiotherapists, (PT) occupational therapists (OT) and speech and language therapists (SLT). Technical staff includes professions such as Software Engineers and Clinical Scientists. An example of social / administrative professionals includes Administrators and business managers. Professionals' level of qualification are categorised according to the International Standard Classification of Education (ISCED, 1997). The academic background guide provides a useful overview of the target audience for the TNA, and overlap exists between the professional profiles identified with TELEMATE and KPT.

### Work package 3 Framework

In order to inform directly the development of WP3 methods and tools a theoretical framework is proposed. The framework aims to: (1) support the development of training guidelines (WP4); (2) reflect the multi-disciplinary nature of 'best practice' in AT service provision; (3) mirror the categories of AT education and training proposed by the HEART Line E framework and the ICF classification, and (4) illustrate the lifelong learning through recognition of fields of intervention (home, work etc.), (5) reflect the specific technical emphasis of KPT (AAC, access and use of PCs and environmental control), and (6) to reflect 'context general' issues while it is recognised that it should be sensitive to regional context variation.

## METHODS

### Design

The training needs analysis (TNA) began with an analysis of professionals working to support people using AT (aids to face-to-face communication, computer access and environmental control) conducted by the project consortium. The TNA then used a dimensional sample, identifying 'representatives' from various professional groups with whom a questionnaire survey was conducted.

### Definition of target audience

It is recognised that the provision of AT related services to young people and adults with disabilities across the partner regions represents a potentially broad professional mix. This picture is further complicated by variation in definitions of professional roles and responsibilities, regional and national policy and structures of service provision. WP3 was therefore faced with significant epistemological difficulties, including understanding what commonalities and significant variations exist in professional profiles of AT service provision in the domains of aids to communication, environmental control and computer access, and how these might vary across the life span of individuals with disabilities and between partner regions.

In a first step to understanding the KPT target audience, the project consortium completed an AT service provision matrix, detailing the professionals involved in AAC, environmental control and computer access in the areas of home, work, vocational/educational, community/leisure and medical settings (see appendix 1).

Using the information documented in the AT service provision matrix (appendix 1), representatives from each partner region organised the professions into a hierarchy according to their perceived degree of responsibility in working in AT, and how they matched the KPT perceived target audience as priority recipients for training. Therefore, consortium representatives were asked to identify those who demonstrate an active and ongoing participation in the hands-on delivery of AT service provision and whom have an identified role in the management of educational and clinical caseloads; the implementation and maintenance of AT (not including funding AT); and perceived level of priority for AT training. Professionals of highest priority might be considered those most likely to seek training and in whom training might have the greatest long term impact. It was acknowledged that this activity required some difficult decision-making but the outcome would support the consortium in understanding similarities and differences in the WP3 target audience. The outcome of this procedure is summarised in table 1 below.

Table 1: Summary of Responsibilities and Priorities for Training

| | **Responsibility** | **Priority for Training** |
|---|---|---|
| **Communication** | 1. S&LT<br>2. OT, PT, Communication Instructor, AT Team<br>3. OP, teacher, personal administrator | 1. S&LT<br>2. OT, teacher, communication instructors<br>3. OP, educator, OT, PT |
| **Computer Access** | 1. OT, PT<br>2. Educator, Rehab Engineer, AT Team<br>3. OP OT/PT | 1. OT<br>2. Educator, S&LT, Rehab Engineer<br>3. OP, Teacher, Educator, AT Advisor |
| **Environmental Control** | 1. OT, AT Team, Rehab Engineer<br>2. OP, OT, PT<br>3. Personal Assistant, SC, PT. | 1. OT, PT, Rehab Engineer<br>2. OP, Doctor, OT<br>3. Personal Assistant, CS, PT |

OT= occupational therapists
PA= personal assistant
PT= physiotherapists
S&LT= speech and language therapists
CS= commercial suppliers
OP = orthopedagogist

The TELEMATE academic background guide outlined above provides a useful overview of the target audience for the TNA, and considerable overlap existed between the professional profiles identified with TELEMATE and KPT.

Initially, and in line with the sampling procedure used in WP1, the TNA aimed to sample the whole population of prioritised services within defined geographical regions. However,

adopting an inclusive strategy in identifying the target audience for the TNA introduced an extremely large and varied population in data collection. For example, considering educationalists alone within an English context, a whole population survey might involve a survey of every mainstream and special school, college, Further Education College, vocational training centre and so on, in the defined area. This task is well beyond the scope of the project and the resources available. Consequently, an agreed sample of professionals was targeted as follows:

The project sampled the participants under three categories. Category 1: Professionals visiting AT centres as part of normal service delivery during the summer 2005; Category 2: Professionals who have visited AT centres in the past; Category 3: 'Known' professionals working in established services (convenience sample). In the first instance participants were recruited from Category 1. Such participants were likely to reflect the primary definition of KPT beneficiaries and reflect the prioritisation exercise. Where AT centres were unable to sample participants working in a range of fields of intervention using category 1 sampling, potential participants were identified by making contact with past visitors to AT centres. Where AT centres served delimited populations, a convenience sample of participants was identified from known and established services.

One hundred and thirty five (135) questionnaires were completed. The distribution of participants across regions is presented in table 2.

**Table 2**

| Profession | Inner London, England | Flanders, Belgium | Emila-Romana, Italy | Ireland |
|---|---|---|---|---|
| SLT | 7 | 7 | 3 | 4 |
| OT | 4 | 7 | - | 5 |
| PT | 4 | 2 | 7 | 8 |
| Clinical Scientist / Medical Engineer | 2 | - | 2 | - |
| Rehab Engineer | - | - | 1 | - |
| Teacher / Educationalist | 2 | 3 | 19 | 6 |
| Doctor | 2 | 1 | 4 | - |
| Architect | 1 | 2 | 1 | - |
| Personal assistant | - | 1 | 6 | 1 |
| Social worker | - | 1 | - | - |
| AT supplier | - | - | 3 | 1 |
| AT advisor | - | - | 3 | - |
| Other | - | - | 7 | 3 |
| Psychologist | - | - | 5 | - |
| Total | 22 | 24 | 61 | 28 |

**Questionnaire**

A questionnaire was designed to explore participants' perceived training needs. The questionnaire design was informed by the WP3 model developed from the Heart Line E project (1995), WHO ICF classification (2001) and informed by work of the TELEMATE

(1999) and EUSTAT (1999) projects. The questionnaire sought to identify: information about the respondent, formal experiences of education and perceived training need for formal education, work focused training experiences and perceived needs and preferred learning styles and experiences. It is possible that the participants selected for this type of task may lack a comprehensive understanding of their own training needs. That is, knowing what it is they need to know. Therefore the questionnaire was designed to represent a menu of training possibilities from which the participants might choose. Opportunities to provide qualitative comments were included. A small pilot study was conducted by the English partners and the questionnaire design was validated by peer review within the KPT consortium.

**Analysis**
The analysis of training needs used descriptive statistics for exploratory data analysis (Tukey, 1977), and for quantitative analysis, non-parametric statistics are used: the Friedman Test, Wilcoxon signed-ranks test, accepting $p<.05$ (2-tailed) as significant.

**SUMMARY OF FINDINGS**
WP3 has been concerned with identifying AT training needs in the KPT target audience. In this way recommendations may be made and priorities identified for the development of training guidelines. This section of the report summarises the key findings from the analysis and makes recommendations for the development of guidelines.

It is recognised that the provision of AT related services to young people and adults with disabilities across the partner regions represents a potentially broad professional mix. This picture is further complicated by variation in definitions of professional roles and responsibilities, regional and national policy and structures of service provision. WP3 was therefore faced with significant epistemological difficulties, including understanding what commonalities and significant variations exist in professional profiles of AT service provision in the domains of aids to communication, environmental control and computer access, and how these might vary across the life span of individuals with disabilities and between partner regions. In this study the professional groups considered as primary recipients of training were identified as the clinical and educational professions: occupational therapy, physiotherapy and speech and language therapy and educationalists.

The work package was successful in seeking the views of a wide range of professionals from each partner region. It is notable that the mean number of years post qualification of respondents was 12 years. Also the majority of respondents (78.2%) reported that they were fairly confident or confident in judging their own training needs. The level of work experience in AT and the levels of reported confidence in identifying training need suggests that it is possible to build on the findings reported here, incorporating them into hypothesised training needs developed by the KPT consortium.

No significant difference was seen in foci of intervention (body structure & function, activity, participation) across the sample despite an evident bias toward the opinions of clinical professions and responses from Emila-Romana. Interestingly, a majority of professionals reported working in multiple settings and within multi-professional teams. It is likely then that training guidelines and those providing training might seek to reflect issues concerned with working in multiple contexts and across foci of intervention. In this way the ecological

validity of training guidelines might be maximised. That is, training will reflect 'on the ground' working experiences of trainees.

A high proportion (80%) of respondents reported no pre-qualification learning in AT. It is possible that this finding reflects the average number of years work experience post-qualification of respondents. AT may be considered a relatively young field and consequently pre-qualification training for these respondents reflects the developing nature of the AT field rather than shortfalls in provision within formal education. Where experience in AT education is reported respondents typically reported favourably on its preparation for working in AT. More typically, work-based training in collaboration with colleagues and support from an AT advisor was cited as a common method of developing skills and knowledge.

A high proportion of respondents indicated a desire to develop knowledge and skills through formal education. This response contrasts with views concerning the most effective delivery of training. In the latter case respondents rated study for formal qualification as a minimally effective means of delivering training. This finding suggests that respondents have distinguished between education and training as distinct learning experiences with different aims and learning outcomes and methods. A question concerning where and when the focus of AT knowledge and skills development should be emphasised is highlighted here. In the context of the multiple learning demands experienced by pre-qualification professionals in training (OTs, PTs and SLTs for example), and the generally favourable views concerning the preparation such experiences provide, it is possible that relatively limited scope exists for developing pre-qualification AT education beyond ensuring that it is included at least as an element of pre-qualification education as part of practice based curricula. It is possible that post qualification AT education opportunities and training might provide the most suitable environment for learning. Arguably, this is particularly relevant for professionals who are not experts in AT or specialising particularly in the field.

When considering challenges to their current work that may imply a training need, respondents identified that *keeping pace with new developments in AT technology* and *increased demand for AT* as the most influential factors. This finding is particularly relevant to the central aims of the KPT project. Challenges presented by *new national or local policy* initiatives featured less highly as impact factors.

Some significant differences were observed in responses to questions concerning training needs (appendix 2). It was evident that variation exists in responses according to European region, professional role and field of intervention. Importantly, however, where specific patterns in response were observed emphasis on particular topic areas was very similar. In the ICF category of body structure and function, training in the field of *cognitive function* was emphasised by OT/PTs and educationalists in Emila-Romana, SLTs in London and those working in educational and community settings more generally. Training in the issues concerned with *sensory impairments* was emphasised by OT/PTs and educationalists in Emila-Romana and professions working in community settings. Similarly, in the ICF category of activity, training in the field of *assessment of clients' strengths and needs* was emphasised by participants across the sample as a whole, and in particular across professions in Emila-Romana and by multi-disciplinary groups working in educational and medical settings. Notably, assessment of clients' strengths and needs reflects closely assessment of cognitive function. This repetition of theme suggests a reliability to the

survey outcomes. Emphasis was also placed on *measuring outcomes* of intervention by respondents representing specific professional groups and those representing multi-professions characterised by common setting. Where significant differences in response pattern were observed in participants' responses to options provided under the ICF category of participation, the topics: supporting the *functional use of AT*, and *developing clients' environments* were emphasised across the sample. At a regional level, developing functional use of AT was emphasised by respondents from Flanders and Ireland, with developing clients' environments highlighted in Emila-Romana. At a profession specific level SLTs in Flanders highlighted functional use of AT and educationalists in Emila-Romana focused attention on developing clients' environments. When considering professional groups across fields on intervention, supporting functional use of AT was emphasised by those working in educational and medical settings. These findings suggest priorities for training development and delivery.

The sampling procedure has emphasised the views of clinical professions as beneficiaries of AT training. It is noted also that a bias exists in the data collection from the Emila-Romana region. The emphasis on clinical professions is also illustrated in the WP1. For example, WP1 has highlighted training opportunities as part of broader programmes in education (25.8%), speech and language therapy (16.7%) and occupational therapy (10.6%). That is, those professionals that might be viewed as providing ongoing supporting to people with disabilities. In the analysis reported here, where statistically significant findings are observed they tend to reveal common emphases for training need. Therefore despite the concerns for differences in working practice, policy etc. between partner regions, some common training priorities can be observed. The development of guidelines may proceed based on an assumption that professional groups across the partner regions share greater similarities than differences in training need (arguably, this type of assumption is embedded in the work of CEDEFOP and the development of European standards).

Participants rated working with a colleague and face-to-face training as relatively effective modes of course delivery. It is possible that this finding reflects the participants' own experiences of learning in AT and the case specific needs of clients using AT. Learning experiences such as private research, distance learning and study for formal qualifications, which might be considered to stand apart from interaction between trainers, trainees and clients were less well favoured. Training providers might seek to integrate flexible modes of delivery in training practice while emphasising face-to-face training experiences.

**Study Limitations**

The sampling strategy was considered appropriate within the time and resources available for the work package. It is notable that a non-probability sample was used and therefore that the findings cannot claim to represent the whole population of professionals working to support people using AT. The findings can nevertheless be used to inform the development of WP4 *(WP4 draft developed before the completion of WP3 therefore acting as a counter balance (audit) of these findings*) and may claim some theoretical generalisability

## RECOMMENDATIONS

Recommendations for the development of guidelines (WP4) and examples of training programmes (WP5 & 6) are outlined below:

1. Recommendation
Where possible, training guidelines might seek to support training providers in designing learning experiences that will match the needs of professionals working in multiple environments and in multi-professional teams.

2. Recommendation
The topic areas developed within the WP3 questionnaire are likely to provide a suitable basis for the development of WP5&6 objectives.

3. Recommendation
In the context of WP5&6 objectives, emphasis should be given to the delivery of training in the following topic areas: cognitive functions, sensory impairments, assessment of clients' strengths and needs, measuring outcomes, functional use of AT, and developing clients' environments.

4. Recommendation
Within the context of WP4 the relevance of guidelines for post-qualification education and training is highlighted but careful consideration should be given to the flexibility of guidelines so that they may provide for the development of pre and post -qualification education.

5. Recommendation
Individual training delivery may be optimised by seeking to understand the learning needs of the target group (developing practice based curricula). That is, training may seek to support the needs and preferences of established teams.

6. Recommendation
It is possible that training guidelines may be developed on an *a priori* assumption that required knowledge and skills of professional groups are similar between partner regions.

7. Recommendation
Training providers might seek to develop flexible modes of training delivery with an emphasis on face-to-face training.

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## APPENDICIES

### Appendix 1

**Actual key players in at service delivery**

| Environ-ment | Home | | Work | | Vocat./Education | | Community/Leisure | | Medical settings | |
|---|---|---|---|---|---|---|---|---|---|---|
| Function | | | | | | | | | | |
| Communication | SLT / PT / OT / ATA / EDU | SLT / OT / PA / SW | SLT / PT / OT / ATA / EDU / TUT | OT / ATA / SLT | SLT / PT / OT / ATA / EDU / Assistent / SNT | SLT / OT / PT / TEA / TA / Assistents / Comm. Instructors | SLT / PT / OT / ATA / EDU / | SLT / OT / PA / SW | DOC / SLT / EDU/ SW / PT / OT / NUR | SLT / OT / PT / NUR / DOC |
| | SLT / ATA / PA / TLO / OT/ DN | OT / SLT / EDU / OP / NUR / PT / DOC / PA | SLT / OHN / | OT / SLT / EDU | SLT / TEA / Access Officers / ATA / PA / OT / PT / TLO | OT / SLT / PT / MSE / TEA | SLT / ATA / PA / TLO / OT / DN | OT / SLT / EDU / MSE | DOC / SLT / EDU./ SW / PT / OT / NUR | OT / SLT / DOC / NUR / PT / PMT / Creative Therapist |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | I | England | | | | | | | | |
| | IE | B | | | | | | | | |

| Environ-ment | Home | | Work | | Vocat./Education | | Community/Leisure | | Medical settings | |
|---|---|---|---|---|---|---|---|---|---|---|
| Function | | | | | | | | | | |
| Computer access | SLT / PT-OT / ATA / EDU | RE / OT / TA | SLT / PT-OT / ATA / EDU / TUT | RE / OT / TA | SLT / PT-OT / ATA / EDU / Assistent / SNT | RE / OT / TA / TEA / Assistents / Comm. instructors | SLT / PT / OT / ATA / EDU / | RE / OT / TA | DOC / SLT / EDU/ SW / PT / OT / NUR | SLT / OT / PT / NUR / DOC |
| | OT / AT / TA / DN / PA / TLO | OT / SLT / EDU / OP / PT / DOC / PA | OT/ OHN/ IT trainer / ESO | OT/ SLT/ EDU | TEA / OT / Access officer / IT trainer / SLT / ATA / PA / PT / TLO | OT / SLT / PT / MSE / TEA | OT / ATA / DN / PA / TLO | OT / SLT / EDU / MSE | DOC / SLT / EDU/ SW / PT / OT / NUR / PA | OT / SLT / DOC / PT / PMT / Creative Therapist |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | I | England | | | | | | | | |
| | IE | B | | | | | | | | |

| Environment | Home | | Work | | Vocat./Education | | Community/Leisure | | Medical settings | |
|---|---|---|---|---|---|---|---|---|---|---|
| Function | | | | | | | | | | |
| **Environmental Control** | SLT / PT-OT / ATA / EDU/ Orth technicians | OT / RE | SLT / PT-OT / ATA / EDU / TUT | OT / RE | SLT / PT-OT / ATA / EDU / Assistent / SNT | OT / RE | SLT / PT / OT / ATA / EDU / Access. Technicians | OT / RE | DOC / EDU/ SW / PT / OT / ATA | OT / RE / PT |
| | OT / CS / CWO / SLT / ATA / PA / TLO / DN | OT / EDU / OP / NUR / PT / DOC / PA | OT / ESO / OHN / CS | OT/ EDU | CS / OT / Access officer / IT trainer / SLT / ATA / PA / PT / TLO | OT / PT / MSE | OT / CS / CWO / SLT / ATA / PA / TLO / DN | OT / EDU / MSE | DOC / SLT / EDU/ SW / PT / OT / NUR / PA / CS | OT / DOC / PT / PMT |
| | | | | | | | | | | |
| | I | England | | | | | | | | |
| | IE | B | | | | | | | | |

ATA= AT Advisors
CS= Commercial Suppliers
CWO= Community Welfare Officer
DN= District Nurse
DOC= Doctors
EDU= Educators
MSE= Master in Special Education
NUR= Nurses
OHN= Occupational Health Nurse
OP= Orthopedagogist
OT= Occupational Therapists
PA= Personal Assistent
PMT= Psycho Motor Therapists
PT= Physiotherapists
RE= Rehabilitation Engineers
SLT= Speech and Language Therapists
SNT= Special Needs Teacher
SW= Social Worker
TA= Technical advisors
TEA= Teachers
TLO= Technology Liaison Officer
TUT= Tutors

**Appendix 2**
**Q10**

| | OT/PT | % |
|---|---|---|
| environmental control | 18 | 8 |
| communication (AAC) | 16 | 7 |
| communication (PC) | 14 | 6 |
| access to technology | 14 | 6 |
| built environment | 12 | 5 |

| | SLT | % |
|---|---|---|
| communication (AAC) | 13 | 8 |
| communication (PC) | 14 | 8 |
| access to technology | 10 | 6 |
| environmental control | 7 | 4 |
| built environment | 5 | 3 |

| | Educationalist | % |
|---|---|---|
| communication (AAC) | 23 | 8 |
| communication (PC) | 21 | 7 |
| access to technology | 13 | 5 |
| environmental control | 11 | 4 |
| built environment | 12 | 4 |

| | OT/PT | % |
|---|---|---|
| movement & posture | 16 | 7 |
| posture & seating | 15 | 7 |
| assessment | 14 | 6 |
| developing environments | 15 | 6 |
| familiarity / tech developments | 13 | 6 |
| sensory impairments | 13 | 6 |
| cognitive functions | 12 | 5 |
| intervention | 11 | 5 |
| domotics | 6 | 3 |
| general principles of AT | 8 | 3 |
| medical conditions | 6 | 3 |
| policy / service developments | 6 | 3 |
| supporting functional use of AT | 8 | 3 |
| training others | 8 | 3 |
| collaborative working | 5 | 2 |

| | SLT | % |
|---|---|---|
| cognitive functions | 13 | 8 |
| assessment | 12 | 7 |
| movement & posture | 10 | 6 |
| supporting functional use of AT | 10 | 6 |
| developing environments | 10 | 6 |
| general principles of AT | 8 | 5 |
| familiarity / tech developments | 8 | 5 |
| medical conditions | 7 | 4 |
| sensory impairments | 7 | 4 |
| posture & seating | 6 | 4 |
| intervention | 7 | 4 |
| policy / service developments | 6 | 3 |
| training others | 5 | 3 |
| domotics | 4 | 2 |
| collaborative working | 4 | 2 |

| | Educationalist | % |
|---|---|---|
| cognitive functions | 22 | 8 |
| assessment | 21 | 7 |
| sensory impairments | 17 | 6 |
| supporting functional use of AT | 17 | 6 |
| general principles of AT | 15 | 5 |
| collaborative working | 14 | 5 |
| movement & posture | 13 | 5 |
| intervention | 13 | 5 |
| familiarity / tech developments | 14 | 5 |
| developing environments | 14 | 5 |
| posture & seating | 12 | 4 |
| training others | 11 | 4 |
| domotics | 9 | 3 |
| medical conditions | 10 | 3 |
| policy / service developments | 5 | 1 |