

Developing a Vocational Training and Transition Planning Programme for Intellectually Disabled Students in South Africa: A Case Study

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ABSTRACT Little information is available on future vocational preparation for intellectually disabled students in South African schools. Currently teachers adapt the National Curriculum Statement (NCS) to educate these students. A literature study was conducted to investigate existing models in the United States of America in order to develop a framework for a South African vocational training programme. The NCS was adapted to make the learning material suitable for intellectually disabled students. The programme was implemented and a mixed method research design facilitated a case study done in a school for intellectually disabled students. Findings revealed that a school vocational training programme can be managed successfully to the benefit of the parents, students and Department of Education. Based on the findings recommendations were made to improve various sections of the comprehensive programme.

INTRODUCTION

In South Africa very few opportunities are available for the intellectually disabled after they have left school and research on vocational training has not been attempted previously. It is therefore important to plan a functional, life-centred, lifelong learning competencies approach for individual students as they near school-leaving age.

The *Education White Paper 6 on Inclusive Education* (Republic of South Africa Department of Education 2005) attempts to address the needs of all students within a single education system. It moves from the categorisation of students according to disability (medical model) to assessing the needs and levels of support required by individual students to facilitate their maximum participation in the education system as a whole. The focus is on ensuring that there is sufficient differentiation in curriculum delivery to accommodate student needs but it permits all schools to offer the same curriculum to students while simultaneously ensuring variations in mode of delivery and assessment processes to accommodate all students. Furthermore, the results from research studies show that the cognitive development of intellectually disabled students is adversely affected by continuous experiences of failure and

they therefore do not set meaningful goals for their future (Zhang and Stecker 2001).

In the Republic of South Africa educational reform efforts that are constantly in the news will continue to spur the debate on how a curriculum for students with special educational (SNE) needs should be structured along with the required instructional content. In the past the focus was on the number of skills that the student performed in the classroom, although this has not allowed them to achieve a quality of life that is comparable to their non-disabled peers and therefore the programme outcomes should reflect the demands of living successfully in the community (McDonnell et al. 1995). Similarly, Cameto et al. (2003) state that combining the curriculum content and instruction with job placement that can be on or off the school campus will ease the transition from school to work. This concept gives students the opportunity to get curriculum content input and learn specific job skills (Discussion Paper: Current challenges facing the future of secondary education and transition services for youth with disabilities in the United States 2004).

Although it is difficult to meet the needs of all the stakeholders, namely the national Department of Education (RSA), the students, the parents and the teachers, the aim of the study is to develop a programme that will satisfy as many stakeholders as possible. The Department of Education

expects special schools to adapt the National Curriculum Statement to the needs of the students (Republic of South Africa Department of Education 2004).

In the beginning of 2005, the development of a curriculum for students with Special Educational Needs (SNE) commenced in South Africa, but the main focus of this curriculum is on creating a pre-Grade R programme to suit the needs of the intellectually disabled student. Vocational training planning, however, does not form part of this curriculum. Furthermore, research shows that there is little information for parents on the future possibilities for intellectually disabled students (The Road Ahead – literature review: 1) and no guidelines are given by the Department of Education as it does not have such information available. Thus, the impetus behind this study is the development and management of a vocational training planning programme for intellectually disabled students.

Gallagher (2002) describes intellectual disability as one of the most powerful and stigmatising labels there is. Furthermore, Zhang and Stecker (2001) mention that intellectually disabled students possess an internal barrier, namely “learned helplessness”, which makes disabled students believe that they are unable to be involved in their own vocational planning. The American Association on Mental Deficiency for intellectual disability defines intellectual disability as

...a substantial limitation in present functioning. It is characterised by significantly sub-average intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptable skills areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work (In Landsberg 2005 : 381).

This has an effect on their cognitive growth and leads to the community perceiving them as non-responsive and disinterested in life around them (Taaniila et al. 2005).

When managers set a goal of developing and implementing a vocational training and transition planning programme to meet the needs of stakeholders, certain planning steps in development of a programme should be followed (Vlachos 2008).

Theoretical Framework: The Development of a Programme

According to the South African Quality Authority (Quality management for education and training providers 2001: 25), a programme needs to be planned and developed on the basis of research and not only on a “desktop”. A comprehensive framework was developed by Sparg et al. (1999) which includes the mentioned steps and is used in this study (Vlachos 2008). The framework involves separate but interrelated steps when starting a new project or programme. These steps are:

- 1 **Needs Analysis:** In doing a needs analysis managers need to know what skills students require, why they need these specific skills and what is required of teachers who will teach these students. Stakeholders involved in a needs planning include students, parents, teachers and the Department of Education (RSA) (Sparg et al. 1999: 24). Once one has established the needs of the stakeholders, a programme can be planned and developed in order to meet the needs of the stakeholders.
- 2 **Planning and Development of a Programme:** According to Sparg et al. (1999: 49) and the South African Qualifications Authority (Quality management for education and training providers 2001: 25-27), planning and development of any programme involve setting goals for the programme, deciding on the tasks that need to be done to meet the goals, when the programme will take place, deciding on the staff required to do the tasks, the resources needed to facilitate the work, a budget for the project, establishing a time frame for reaching the goals and evaluating the programme.
- 3 **Implementation and Evaluation of the Programme:** The implementation stage involves managing the work, managing the resources and managing the students. Implementation often refers to structures and systems. The system should tell what will be taught, when classes will take place, where classes will be offered, how classes will be supervised and how records will be kept (Quality management for education and training providers 2001; Sparg et al. 1999). The three aspects of implementation are:
 - **Managing the Work:** To be able to manage the work, the vocational training manager has

to manage the process of selecting students, running the training classes, administering the project, managing information flow and keeping the organisation's and students' records (Sparg et al. 1999). Records are important forms of monitoring and controlling a project. Keeping records of classes is essential to evaluate students' work and to keep track of attendance figures (Sparg et al. 1999).

- *Managing the Resources:* The second aspect in the implementation of the programme is to manage the resources, namely, money and time. Managing resources is essentially budgeting. A budget describes the system in financial terms and provides the yardsticks with which organisational performance can be measured (English 2005).
 - *Managing the People:* Blandford (2006: 20-21) and Sparg et al. (1999) state that to manage is to create the conditions under which the work will be done. It is important that managers are polite and respectful of everyone in the organisation, consult people when a management decision is going to affect them and always give people opportunities to learn and develop.
- Evaluation of the programme includes

identifying areas for improvement, setting priorities and goals, deciding on new directions, raising and maintaining standards and providing accountability to stakeholders (Sparg et al. 1999).

These steps for a development programme are outlined in Figure 1.

Research Problem

Teachers in special needs education for intellectually disabled students have identified the lack of vocational training as part of the programme for senior students as a major shortcoming in their education. In South Africa career services in Special Needs Education (SNE) are either very limited or non-existent. As a result of this the study attempts to address the following research question: How can a vocational training programme be developed and managed within the framework of the National Curriculum Statement in South Africa according to the needs of intellectually disabled students in the school? Two sub-questions were formulated:

- What steps must be taken for the development and management of a vocational training programme for intellectually disabled students in the school?
- How will the implementation of a vocational

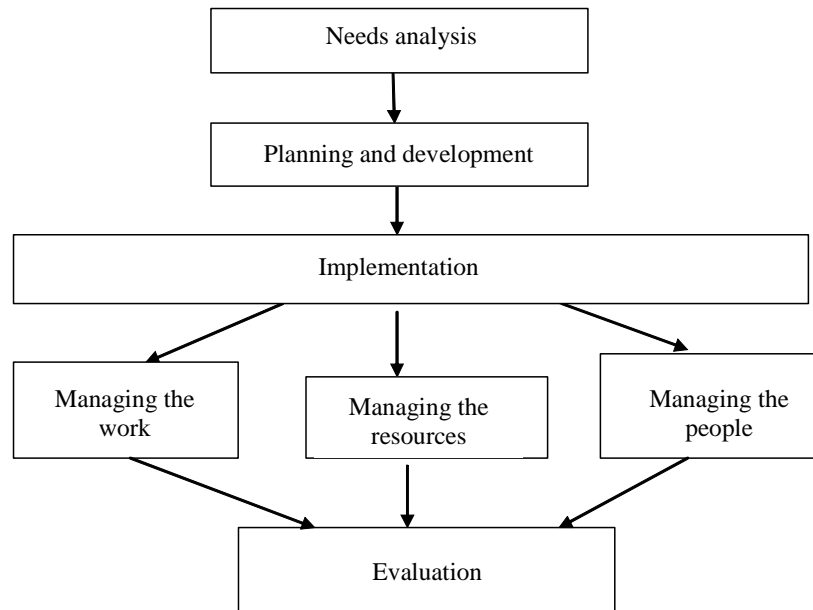


Fig. 1. Steps for a development programme

training programme influence the knowledge, values and skills of three selected students?

Valuable information on the involvement of intellectually disabled students and their parents at the school has given direction to the development of a programme that meets the requirements of the South African Constitution and the political and economic environment.

Literature Review: Development of a Vocational Training Programme for Intellectually Disabled Students

Research in the United States has identified a number of programme practices which are associated with the successful vocational training of intellectually disabled students (McDonnell et al. 1995). These practices include person-centred transition planning and transition assessment, community-referenced curriculum and instruction, an Individualised Vocational Programme (IVP) job placement prior to leaving school and the importance of family involvement (Sitlington et al. 2000).

Unfortunately the field of vocational education and training in Southern Africa has been badly neglected and, hence, the vocational training programme in the United States was adapted and used as a framework for developing a suitable programme (McGrath in Akoojee et al. 2005). Article 13 of the Disability Rights Charter of South Africa states that disabled people shall be entitled, encouraged and assisted to live independently in their communities and to develop the skills necessary to enable them to live in broader society and they shall be provided with adequate and appropriate support systems to do so (Disability Rights Charter of South Africa). However, very few people, with or without disabilities are totally independent in life, as most people conduct their individual affairs with mutual reliance on other people (Sitlington et al. 2000).

The South African Qualifications Authority (SAQA 2001) maintains that any programme must be planned and developed on the basis of research. Sparg et al.'s (1999) framework was used for developing the vocational training programme. The South African dilemma is that research has not been done in this field previously and that we have to investigate successful programmes that have been implemented in other countries.

The National Curriculum Statement has several components that are flexible to allow for adaptation. A few examples are student-centred

and activity-based education, and the fact that no content or method is prescribed, activities are flexible, the context can be made relevant to the students' needs, assessment strategies are flexible, assistive devices may be used, and a lesson plan's time allocation can range from a single activity up to a term's teaching (Republic of South Africa Department of Education 2003). Each successful learning experience is a stepping stone to more success and the school is pivotal in creating the conditions for success at school (Engelbrecht et al. 1999). To prepare students for life after school, the goals are interdependence, independence and ultimately independent living (Sitlington et al. 2000).

Adaptation methods that were used in planning the programme include curriculum straddling where both grades and phases may be straddled, designing down, which involves breaking down the assessment standards in order to build them up logically and progressively, and limiting the number of learning programmes according to the needs, strengths and interests of the students.

Each "orientation to the world of work" assessment standard in the Grade 7–9 Life Orientation curriculum was taken into account and adapted. The health, social development, personal development and human movement learning outcomes of the Life Orientation learning programme form an important part of the Orientation to the World of Work Learning Area.

The assessment standards and curriculum content for the Foundation Phase on Health Promotion is suitable for integration into the vocational training programme. Assessment standards from the Foundation and Intermediate Phase Social Development Learning Area and Movement Learning Area integrate well into the vocational training curriculum. The Foundation, Intermediate and Senior Phases curriculum assessment of the Personal Development Learning Area standards can successfully be used as they are, or designed down if necessary. Other learning area assessment standards (Economic and Management Science, Technology, Language and Mathematics) can be successfully adapted to integrate into the vocational training curriculum to the benefit of the student.

An individualised vocational programme (IVP) was subsequently developed according to the students' individual needs and, together with the input of the team members (parents, class teacher,

occupational therapist), they were given an opportunity to have a say in their own education and future. This is in line with the features for a training model as advocated by Jones and Howley (2010). During the IVP meeting team members decided on an appropriate home independence programme, and who will take responsibility for the programme and the assessment thereof. Disability grants were discussed with the parents and written documentation on the various aspects of the vocational training programme was given to the parents. The vocational manager scheduled, planned and conducted the IVP meetings and was the person accountable for ensuring that the student's IVP was carried out and revised annually (US Department of Education).

Self-assessment is used in the home independence programme and the school tasks as it helps students take control of their own learning. This is a skill which has to be taught so that they develop systematic habits of reflection, learning from each process and turning it into internal motivation (Engelbrecht et al. 1999).

Job Placement and Training

The purpose of job/task placements in the school is to provide the students with an opportunity to explore a number of occupations, to gain work experience in the safe surroundings of the school and to learn specific vocational skills. By rotating some of the jobs/tasks after a six-month period the students have the opportunity to be exposed to a number of different jobs/tasks in a one-year cycle. Typically, a skill is considered learned when the student performs the task correctly for three of four consecutive trials without any assistance from the teacher (Inge et al. n.d).

Family Involvement

Families play a key role as job developers and advocates in marketing their children's skills and abilities. Parents and families should look within their own networks – neighbours, colleagues and extended family members – to seek opportunities for their children (Parent brief: Person centred planning: A tool for transition 2004). The ultimate goal of vocational training and transition planning is to attain independence and interdependent living.

RESEARCH DESIGN

An explorative, mixed method research design, in particular a case study, was considered to be most suitable for the study. "A case study promotes better understanding of a practice or issue and facilitates informed decision-making" (McMillan and Schumacher 2006: 333). The study included the exploration and description of a 'bounded system' (Creswell 2007: 244), a particular Special School in South Africa that caters for severely intellectually disabled students. The mixed method research design was preferred for the sake of a more complete picture of human behaviour and experience. Bryman (2006), Miller and Gatta (2006) and Leech and Onwuegbuzie (2009) state that mixed methods have particular value when a researcher is trying to solve a problem in a complex context. In this mixed methods research study two quantitative and three qualitative instruments were used. Purposeful sampling was used in the study to select information rich participants for the study. Careful consideration was given to each individual learner's intellectual and multiple disabilities as possible participants for the study before a selection was made in this study.

As a quantitative instrument, a three-point Likert scale questionnaire was used to measure the students' skills at home to give an indication of the level of dependency/independency (at home) before implementing the programme. After six months of implementation the students' skills at home were measured again on the same instrument to ascertain the development that had occurred within the vocational training programme. A three-point Likert scale was also used to assess skills and value development while observing the participant carrying out the school jobs/tasks assigned as part of the vocational training programme. The Talking Mats instrument is an adapted psychometric instrument the students can use to indicate their likes and dislikes, to express views and choices and to express opinions on careers not previously known to their families.

The qualitative instrument, namely four separate rounds of interviews with the parents and the student, was conducted at a place and time convenient to the participants. The field observations were done qualitatively when participants were observed performing the school jobs/tasks. The criteria used were the student's

work motivation, work endurance, basic work habits in relation to the work tasks and human environment and the student's productivity. Furthermore, a Likert scale was developed as a quantitative instrument to record the student's value and skills attainment over a lengthy time period. Quantitatively descriptive notes were made as well as recordings of the participants' non-verbal body language.

The following ethical measures were adhered to and obtained approval (from the Department of Education) for conducting the research, informed consent from the parents and informed assent from the students. To ensure validity, reliability and trustworthiness, prolonged field work was done and the results were discussed with the occupational therapist who also worked in the field. The interview data was recorded with a tape recorder and later transcribed.

The target population consisted of six females and seventeen males severely intellectually disabled students and, using purposeful sampling, two females and one male participant were selected in order to obtain information-rich cases for in-depth study. As possible participants for the study each individual student and their intellectual and multiple disabilities were considered carefully before a selection was made.

Lucy was a 17 year old female participant with Trisomy 21 syndrome diagnosed at birth and Mary showed dysmorphic features consistent with Prader-Willi syndrome. Jacques presents Sturge-Weber sequence and was born normal. At the age of three months, he was diagnosed with cerebral palsy as a result of child abuse and the stroke he suffered two weeks after the incident.

Data was collected by means of in-depth interviews held with the student and parent participants, individualised vocation programme (IVP) interviews, field observations, results from a home independence programme (record review) and an interview with the teacher responsible for the curriculum vocational training input.

Qualitatively, four rounds of interviews were conducted with the sample population. The goal of the first round of interviews was to establish the parents' and student participants' feelings, knowledge and needs in connection with introducing a vocational training programme at the school. Open-ended questions were asked for this purpose.

With the second round of interviews the goal

of the adapted aptitude test interviews (Talking Mats programme) was to gain knowledge on the students' interests in vocational possibilities. After a maximum of thirty different pictures resembling the possible vocational possibilities had been shown to the student, a photocopy was made of the result obtained. This was kept for the IVP interviews with the parents and served as a guide of possible job/task placements in the school.

The third round of interviews consisted of the IVP interviews with the goal of identifying a student's individual goals and to help students, families and professionals to draw up plans that would support students as they strive to achieve their dreams. For these interviews one-hour written appointments were made with the parents.

The fourth round of interviews was conducted after the newly developed vocational training programme had been implemented for six months. The interviewer wanted to establish the parents' feelings and knowledge in connection with the vocational training programme that had been introduced at the school.

A software tool for qualitative data analysis, Hyperresearch, was used for data analysis in this study. The fully operational instrument was downloaded from the internet (www.researchware.com). Using the software programme analysis began as soon as the first set of data had been gathered (round 1 interviews, questionnaire, Talking Mats interviews and IVP interviews) and ran parallel to the rest of the data collection over a six-month period.

The questionnaire was divided into three sections, namely section A: leisure activities subdivided into five sections; section B: personal management subdivided into four sections and section C, the work domain. Each activity in section A and C is rated on a scale of 1 to 3 (never, at least twice monthly and at least twice weekly). Section B is also rated on a scale of 1 to 3, with a score of 1 for once per week and a score of 3 for daily. A higher score indicates that activities are done more often and thus a level of higher independence.

On completion of the six-month implementation period of the vocational training programme, the same questionnaire was given to the parents to complete again. The scoring was done in the same manner.

The participants' values in performing the school tasks were evaluated once per week on a

three-point scale. The value scale consists of five measurements for values, namely cooperation, respect, perseverance, friendliness and responsibility in completing these tasks. A three-point scale (very good, competent and insufficient) indicated their values on that particular day, with 3 being very good and 1 insufficient. A mean score of values was calculated bi-weekly and presented on a graph.

The same method was used for assessing the student’s attainment of skills. The five components were subdivided between 4 to 7 criteria. A three-point scale was used with a score of 3 for very good, 2 for competent and a score of 1 for insufficient. A mean score was calculated bi-weekly and presented on a graph. Also written on this form was demographic information about the time, place, and date of the field setting where the observation took place (Creswell 2003).

The data was analysed according to the needs of the participants and task placements were done accordingly.

A number of strategies to enhance design validity, reliability and trustworthiness were used in this study. They inter alia include prolonged field work, interview data with a number of role players which were recorded and transcribed, the

administration of questionnaire and member checking. The extent to which findings from this study can be generalised to other examples in the class depends on how far the example is similar to others of its type.

FINDINGS OF THE STUDY

A visual framework of the analysis of the findings was drawn up in order to make the relationships between the aspects in the study easier to comprehend (Fig. 2). These aspects reveal the needs analysis, the planning and development of the programme with the input of parents and students, the implementation of the vocational training and transition planning programme and the home independence programme, the influence of the programme on the skills, knowledge and values of participants as well as the evaluation of the programme.

Needs Analysis

On asking the parents what their needs for the vocational programme were it was clear that they needed guidance on the possibilities available. The necessity of a needs analysis is

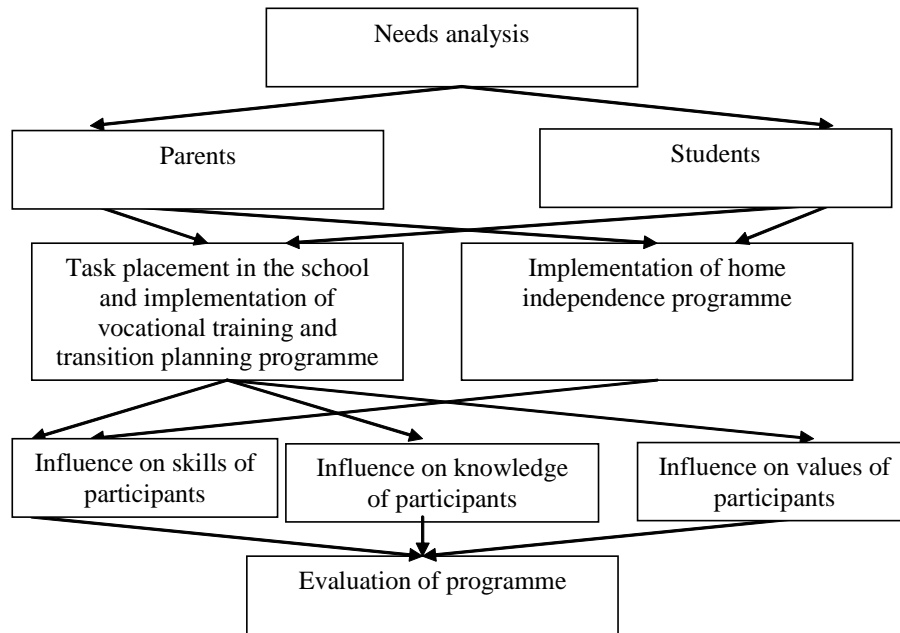


Fig. 2. Visual framework of data analysis

also supported by Blandford (2006) and Sparg et al. (1999). Response of parents included the following (Vlachos 2008: 166): “We don’t know because we do not have a guideline” and “There are no contact points or groups that can actually say to you here are opportunities for people with disabilities”. The participants themselves, as in Li’s (1998) study, were unable to give an indication of what they would like to do in a vocational training programme.

With the Talking Mats adapted aptitude test, Jacques’s results showed that his interests lie in, among other things, food preparation and packaging. As his parents’ general concern was for him to become more literate, it was decided that he would be responsible for costing the food donations three times per week at the school. Although he felt confused about caring for people, he wanted to push a wheelchair. His third task was to open the blinds and windows in the consumer studies classroom in the morning and close them at home time.

Lucy’s attention span was shorter and therefore fewer pictures were shown to form an idea of her vocational interests. Because she showed an interest in caring for children and preparing food it was decided that she would pour milk or fruit juice each morning for the 70 students on the nutrition programme and prepare and serve eats once a week for two class voluntary workers and once a week for the voluntary hairdressers. As she liked working in a laundromat and cleaning (according to the Talking Mats adapted aptitude test), her school tasks were further extended to washing the towels used by the hairdressers.

As Mary liked preparing food and showed a preference for gardening, it was decided during the IVP interview that she would lay the buffet table daily for the nutrition programme and deliver flowers three times a week to the teachers. As she also liked the idea of working in a laundromat, she was assigned to wash dishtowels.

In analysing the Talking Mats adapted aptitude test, it was striking to note that the views of the parents of the two female participants concerning the occupations that they thought their children would like differed from the test results. This was discussed with them during the IVP interviews and served as an eye opener to them.

According to Heinen (in Guggenheim 2003: 113), there is seldom an ideal match between the

skills profile of the disabled person and the requirements of the job in question. In the majority of cases shortcomings unfortunately exist so that the two profiles do not fit together (Vlachos 2008). Particular school tasks were assigned to participants according to the interest they showed in them.

The Influence of the Programme on the Skills of the Participants

The objective of this study was to see if there was an improvement in the skills development of the participants over a six-month period in order for them to gain greater independence. The data on the skills development of the participants was qualitatively analysed according to their work endurance, work motivation, their basic work habits and productivity (Vlachos 2008).

The participants’ work endurance was analysed in terms of their attendance and punctuality, self-discipline and psychological stamina. Their attendance record pertaining to the fulfilment of their school tasks were recorded according to their actual school attendance and were 70% in Jacques case and 98% and 97% respectively for Lucy and Mary. Jacques’ punctuality average was unfortunately negatively influenced by his failure to attend wheelchair maintenance. On the other hand, Lucy’s punctuality was excellent and usually she was waiting eagerly for the classroom and cupboard to be opened to perform her tasks (Vlachos 2008).

Lucy and Mary showed better self-discipline than Jacques. Guggenheim (2003: 134) maintains that the low level of self-control of intellectually disabled students goes hand in hand with an impaired ability to assess their own abilities. This may have been the case with Jacques as is evident in the following field observations: “Jacques is according to himself too busy to attend the curriculum class” and “Within a few minutes Jacques returned the costing book and tried to leave as quickly as possible.” Although Mary did not enjoy washing the dishtowels and often arrived looking “like a very cross elephant on stampede”, she always completed her task successfully.

Figure 3 shows the participants’ work endurance over an 18-week period. Every third week the participants’ attendance and punctuality, self-discipline and work endurance was recorded on a Likert scale as very good, competent or

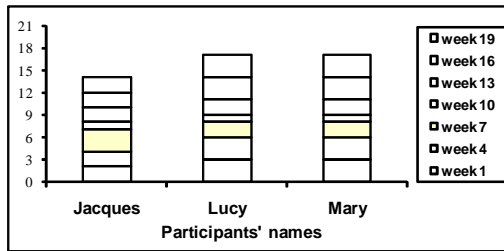


Fig. 3. Participants' work endurance

insufficient and scored as either a 3 for very good or a 1 for insufficient.

The participants' work endurance showed a drop the first week after the school reopened after the June/July school holidays (week 10). The reason for the drop after the school holidays may be attributed to the fact that the participants had forgotten the routine and had to be reminded.

Work motivation was divided into three subcategories, namely responsibility, level of interest and effort and intrinsic motivation. The participants' work endurance scores were higher than their work motivation scores. Their lack of motivation coincides with Zhang and Stecker's (2001: 301) statement that intellectually disabled students do not set meaningful goals for their future. Landsberg (2005: 386) states that the motivation of intellectually disabled students is influenced negatively by their continual experiences of failure.

Work habits data analysis was done in two sections, namely in relation to the human environment and in relation to work tasks. Basic work habits in relation to the human environment are analysed by means of the participants' ability to communicate and their attitude towards the teacher and the other students. The participants' work habits in relation to their human environment are presented in Figure 4.

The graph does not show a significant difference in the participants' work habits in relation to their human environment. Although Lucy has very limited expressive verbal skills, her score was the same as Jacques who has good verbal skills.

Work habits in relation to work tasks focus on concentration, memory, instruction interpretation, decision-making skills and the use of materials and tools. The three participants' work habits in relation to the work tasks were not as good as their work habits in relation to their human environment. However, it is significant that

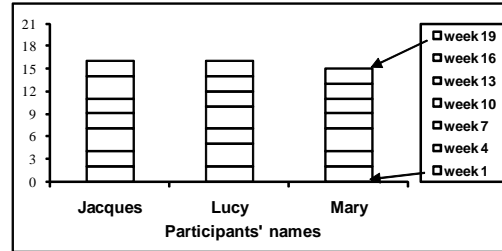


Fig. 4. Work habits in relation to human environment

the lowest score for two of the three participants once again was directly after the school holidays (week 10) which indicates that the three-week school holiday affected their memory. Guggenheim (2003) states that intellectually disabled students have difficulty with memory retention and memory recall.

The productivity area of skills development seemed to be the only area in which an improvement in skills over a six-month period in all three participants was seen. Productivity was measured in terms of work speed, quality of output and consistency of performance. Lucy's rise in productivity was the quickest while Mary scored well for the longest period.

The home independence programme was analysed quantitatively. All three participants did as requested and the results are given in Figure 5. Completion of tasks is indicated as percentages.

Mary had the highest average for completing the home independence programme tasks, namely 81 %, followed by Lucy with 78% and Jacques with 63%, which is much higher than the school task punctuality averages.

As with the home independence programme the questionnaires were analysed quantitatively. The total scores of the three sections in the questionnaire, namely leisure activities, personal

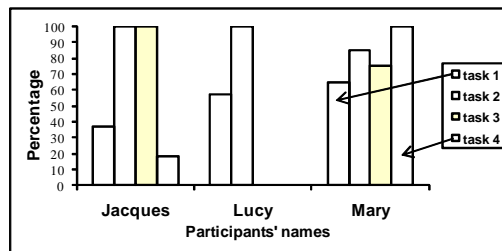


Fig. 5. Percentage times completing home tasks

Table 1: Participants' independence scores

Names	<i>Leisure activities</i>		<i>Personal management</i>		<i>Work experience</i>	
	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>	<i>Before</i>	<i>After</i>
Jacques	71	64	66	72	16	22
Lucy	82	83	34	34	13	15
Mary	63	63	37	52	8	13

management and work experience, are compared in Table 1 as calculated before the start of the programme and on completion of the programme.

Jacques showed an increase in scores in two of the three sections, namely personal management and work experience. Lucy's independence showed a slight increase in all three sections and she, together with Jacques, was more independent after completion of the programme. Mary's independence levels rose the most over the six-month period.

The Influences of the Vocational Training on the Knowledge of the Participants

Gramlich et al. (2003: 1) believe that intellectually disabled learners do not understand a clear link between what they learn in school and job expectations. As such a connection needs to be made between work experiences, work behaviour and what they are learning (Vlachos 2008). The data analysis shows that the influences of the vocational training programme on the knowledge of the participants was limited and that participants had little ability to retain verbal knowledge input.

The participants had very limited occupational awareness and had little ability to retain verbal knowledge input. Lucy, for example, had limited verbal communication abilities and she could also not give much feedback on questions asked as the curriculum teacher's notes showed: "Lucy kept on talking about her mommy and paid little attention to what the teacher said" and "Lucy had no clue on what was discussed and just sat nodding her head".

The study shows that participants had knowledge input specifically on vocations and transition planning over a six-month period, although test results on knowledge gained are not a reliable measure to analyse if they have gained knowledge. Lucy's mother remarked, "She is not able to give feedback on what she did at school" (fourth round of interviews) and Jacques grandmother reported, "He knows more now."

Pitsch (in Guggenheim 2003) states that models, pictures and drawings are more suitable aids than the spoken word to reinforce the storage of learning in the memory of the intellectually disabled and to retrieve it later. Learning proceeds in small steps, which means that teachers need to speak clearly, use straightforward terms and give each object just one name. The sentences need to be concise and short and teachers must add gestures to stress what they intend to say (Vlachos 2008).

One particular aim of the vocational training and transition planning programme was to determine if the values of participants had changed during the programme.

The Influence of the Programme on the Values of the Participants

Every third week the participants' values were evaluated according to the respect and friendliness they showed during the study and towards other students and the class assistant. A score of either 1 for insufficient, 2 for competent and 3 for very good was allocated. The participants' perseverance was observed by evaluating their punctuality and stamina in performing the task, their responsibility was evaluated according to their completion of all the steps in the task they were supposed to do and their cooperation was evaluated on how willingly they performed the tasks.

No significant difference in values was experienced from the beginning of the programme to completion after 18 weeks (Vlachos 2008). The study revealed the following:

- Jacques' respect, friendliness and perseverance were slightly higher for the duration of the programme than his responsibility and cooperation.
- Lucy scored overall higher scores than Jacques. Her values are characterised by higher scores on friendliness and cooperation. No significant changes in values were experienced with Lucy when comparing the scores

towards the end of the programme with the scores attained with the beginning of the programme.

- The same comments applied to Jacques and Lucy applied to Mary, with no significant changes in values during the whole programme. Mary's best value was her perseverance while friendliness was her poorest value. Her values for respect, responsibility and cooperation were more or less the same.

An Evaluation of the Vocational Training and Transition Planning Programme

As a whole the programme development and implementation was successfully done for the intellectually disabled students (Vlachos 2008). Unfortunately no time was provided on the school's timetable for teaching and evaluating the tasks given to the participants in the stud and other students in the school. I also took a longer period to teach the tasks to the participants and other students.

CONCLUSION

The findings show that depending on the individual their punctuality, psychological stamina, adapted communication ability, attitude towards others, use of materials and tools, quality of output and consistency of performance vary between good and acceptable. Unfortunately disabled people's potential and abilities for work are often, and inappropriately, assessed by medical rather than vocational criteria. As a result the focus is directed at disability rather than ability. This raises questions about their potential value as employees; including, for example, their productivity and attendance at work which may be wrongly assumed to be lower than average (Hales 1996: 146). Teachers, students and parents need to acknowledge this but also have to realise that they have to make the community aware of the intellectually disabled and their strengths. Moreover, they (parents and teachers) have to advocate equal wages for disabled people for performing the same job as others in the workplace instead of accepting a token of thanks for employing their children/students.

From the findings the following conclusions were made:

1. Integration into the Education System and Legal Enforcement: Vocational training should

be fully integrated into the overall educational system within the school. The programme should be enforced legally and form part of the curriculum and not be seen as an addition to the school programme. Meanwhile teachers will have to take responsibility for their own professional development in order to facilitate vocational training classes.

2. Role of Stakeholders: Students, their families and the school should be involved and motivated to actively participate in the vocational training process. The goal of special education should always be kept in mind, namely adult interdependence or independence. The Department of Labour should rethink the skills development programme in order to make it accessible for intellectually disabled students.

3. Performance of School Tasks: Students with fewer and less well-developed skills benefit more from high repetition tasks. The skills involved in tasks that are performed less than once a week take a long time to master successfully. School tasks open the doors to employment in smaller steps to make the new adventure less painful and should form part of all vocational training programmes.

4. Parents' and Participants' Motivational Level: The participants could have perhaps done better with the home programme if the parents had been motivated once or twice during the programme to motivate their child even more.

5. Revision of Complex Skills in the Home Programme: Depending on the complexity of the tasks, goals and tasks must be revised after six months. Goals involving complex tasks (for example, learning to drive) or semi-permanent tasks (for example, carrying on with the Saturday morning part time job) that are difficult to reach have to be ongoing.

6. Grouping Students to Benefit From Learning Material: Students will benefit more by grouping students with more or less the same cognitive ability into groups when presenting the learning material. The learning material and the teacher's input should be practical and connected to lived experiences to enable improved attainment of knowledge.

Thorough research in the training and development of teachers to teach vocational training and transition planning for intellectually disabled is crucial to ensure that teachers constantly strive to achieve the best learning outcomes for the intellectually disabled. If this is neglected,

objectives to secure an advantageous future for students and their parents cannot be attained.

Vocational education and training (VET) in South Africa is only one part of a large education and training system (Akoojee et al. 2005). This raises issues about the appropriate education levels at which VET should be offered. It is important to consider whether VET systems should have formal educational requirements for entry or whether there is a place for recognition of prior learning. It is also important to determine the appropriate base in terms of education, age and experience for different levels. The expression: 'It takes a village to raise a child' is never truer than when referring to a child with a disability.

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