

Progressive Career Assessment with Transitioning Students

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Abstract

This paper describes a theory and a pilot project involving a process of guided career assessment for transitioning students. It is progressive, occurring over three to four years. It blends career development, career assessment standards and student involvement into the assessment process, as envisioned by earlier VECAP writers. It incorporates assessment techniques recommended by the reauthorization of IDEA. It recognizes a consultative model of career assessment.

Introduction Students in Transition

By this point in time it is well-recognized that students with disabilities face significant challenges in making the transition from high school to the adult work world, and that they require an emphasis on effective career assessment for good transition planning. The National Longitudinal Transition Study-Wave 2 has been documenting the types of progress and persistent obstacles these students face concerning retention in high school, postsecondary training and employment (Wagner, Newman, Cameto, Levine & Garza, 2006). There was a thorough review and discussion of the difficulties and assessment issues (including assessment's central importance versus its limited scope, use, and outcome evaluation) relative to the transition population in the last VECAP Journal (Dean, Ashley, Schmidt, & Rowe, 2006).

Changes in Assessment

The face and nature of vocational evaluation has been changing radically over the last two decades. Hilyer (1997) had recommended moving from an objective, test-based "evaluation" to a more holistic "assessment" focusing on career development and using the client's input. But Woodford and Modahl (1999) observed that from the 1980's forward Vocational Evaluation (VE) has trended toward shorter, more uniform, and more psychometric evaluations. (Dean

and colleagues noted how Virginia's PERT program has started to provide an evaluated alternative.)

During the last six years, after considerable work and study, Maryland produced its "Career Assessment Services" Standards, which received national recognition, and described a range of services from

These social skill training approaches focus on teaching the skills needed to interact, and have been effective in teaching skills in the training setting. Unfortunately, this skill training alone has not resulted in increased employment outcomes

tightly prescribed "itemized" assessments to lengthier comprehensive ones. (Johnson & Blakeney, 2003; Piatt, Fayne, & Pell, 2001) Two years ago, the national vocational evaluators' organization formally changed its name to Vocational Evaluation and Career Assessment Professionals (VECAP), in recognition of the changed practices and directions in this field. At the closing session of the 2005 biennial VECAP Forum, some panelists called for future practices in career assessment to include close collabo-

ration with career development specialists.

Regionally, Maryland State Department of Education, representatives of business/industry, and Workforce Development associates produced a Maryland Career Development Framework curriculum for Pre-K to Post-Secondary/Adult levels, and identified the career development processes, knowledge, and skills to carry persons into the adult work world as capable workers, family members, and citizens. (MSDE, 2005). At the national level, the National Career Development Standards have also been developed.

There is now a more natural overlap between the work of Career Assessment specialists and Career Development specialists in targets of knowledge and skill levels. The Career Assessment profession is in a most natural position to evaluate the readiness and future needs of persons toward careers; Hilyer judged that "evaluators are well equipped with the skills and experience to step into this role within a career development model." But the technology of practice is not evolved to fully support that, and career assessment specialists' knowledge of the world of work may not have kept up with advancing frameworks of career development that have been established by parallel professions in education and workforce career development.

In particular, vocational evaluation/career assessment has focused on what might be considered "point-in-time" assessment.

That is, an individual undergoes some type of career assessment (usually from one day to three or four weeks long) and it remains focused at a particular point in that person's life. It does not provide for learning opportunities, documenting change over time, and actual career exploration and development *within the assessment* although these activities are often recommended as a product of the assessment report. Langford (2001) described a series of career assessments for transitioning students at eighth, ninth, and twelfth grades. Such assessment has validly been described as a "process" but that process has tended to focus on the tools and sources the assessor has used to gather and sift information at that point in time.

Progressive Career Assessment

By way of contrast, "progressive career assessment" would be defined by some of the following features:

- The "process" is illuminated by the plans, actions, and growth displayed by the student being assessed;
- The time frame is tracked not by days or weeks, but over months and even years of the transition student's career progress;
- The career assessment specialist's role is marked by consultation and guidance, although direct testing and assessment may be included.

An Implemented Model

This paper examines how a career assessment specialist may focus on some new skills and knowledge sets, including career maturity indicators; national and/or state career development framework standards; other workforce standards such as Educating For the Future benchmarks (Stein, 2001); and new ways of assessing learning and training capacities in students, designed to predict competence and fit in occupational fields. Methods such as RTI (Response To Intervention) and Functional Vocational Evaluation (FVE) as mentioned in the latest revision to IDEA would fit into this category.

I. The Transition e-Assessment Pilot Project

One major illustration of tracking student career assessment over time involves

a pilot project of the Workforce & Technology Center (WTC) in Baltimore (of the Maryland Division of Rehabilitation Services –DORS) in conjunction with the Maryland State Department of Education. Developed over five years and then begun in the late spring of 2006, it uses distance technology to assess, track, consult and guide eligible transitioning students over the last three years of high school. This illustrates the career-assessment-over-time principle.

The WTC is one of the nine state-operated comprehensive rehabilitation centers in the U.S., and the Career Assessment Services (CAS) Department has 14 evaluators, with additional clerical and case management support. It potentially provides services to transitioning students all over the state of Maryland, both directly at the WTC, and in short one to two day assessments in schools and in outlying local DORS offices. Of 1200 clients served each year by the CAS department, about 30-40% of those are transitioning students. Although many other students are served also by private Career Assessment vendors operating under state standards, and the schools have increased their transition staff efforts in interest, aptitude, and other vocational assessments, DORS as an agency has a targeted focus on increasing its effectiveness with transitioning students. Many still slip by and do not register with DORS.

The current pilot project started seven years ago, with an effort to coalesce students' career assessment and career development data from various sources into a portfolio, and has evolved into a present manifestation as an electronic file, the Transition e-Assessment Package. It is requested (by students, counselors, teachers, or parents) and stored via email, although school staff can keep electronic copies of the template for use with their students. It CAN be used by students in any grade from 9th through 12th, although it is recommended for the earlier grade students because it gives them time through their high school career to try out various explorations, revise their packets, and obtain guidance.

The e-Assessment Package itself contains the following elements:

- A Welcome Page
- A student ID page and simplified directions

- My Career Interests page, noting surveys taken, top 3 job choices, and evidence of career exploration for each choice.
- An Employability Skills checklist – for self rating and rating by three competent adults; provides assessment and prescriptive training targets.
- My Vocational Profile – containing strengths, career code, and other positive personal characteristics, to the left side; Disabilities, functional limitations, and needed accommodations/AT on the right side. This is a Self-Advocacy tool for postsecondary support and for job searching.
- Summary Evidence section – This page requests the student (and helpers) to provide up to five electronic pages of evidence of skills in four major areas: Academic Skills, Thinking Skills, Personal Qualities, and Technology Skills. This could include photos, work samples, test results, essays, art designs, etc.
- A Resume Worksheet section, designed with the consultation of the WTC Employment Services Department. There are two pages of examples, using language and experiences that might be within the range of typical students.
- A Work and Personal References page. The entire document is accessible in simple text for screen readers to meet UDL (Universal Design for Learning) principles.

It could be observed that this package is not itself an "assessment" in a traditional sense. It was in fact designed to be the "tip of the iceberg" targeted towards the end point, a successful exit from school and into the adult world. Its completion rests on a significant amount of progressive exploration, effort, guidance, help from others and revision. This package requires at least a couple of years for effective development, and tends to be largely unsuccessful if used as a last minute exercise at the end of high school.

The WTC/CAS Department provides a special "Transition Assessment" email address to send blank templates, receive completed packets from students/counselors, and to send out other information. A

TRANSITION ASSESSMENT PACKAGE EVALUATION TOOL: (1/07)

A Progressive Career Assessment Summary

Points Possible: Obtained

1. STRUCTURE

| | |
|---|-------|
| Page 1: Identification/Contact page – completed | 1 |
| Page 2: Career Interests Page | |
| - Has taken at least one career interest survey | 1 |
| - Has at least 2 job titles listed with some amount of exploration documented | 1 |
| Page 3: Employability Skills - Completed | 1 |
| -Hi correspondence: Self vs. Others | 1 |
| Page 4: Vocational Profile (At least 50% completed) | 1 |
| (90% completed or better) | 1 |
| Page 5: Summary Evidence: | |
| - Has one (1) to two and a half (2 ½) pages | 1 |
| - Has three (3) to five (5) pages | 1 |
| Page 6: Resume worksheet. (p.1) | |
| - Eight sections have entries: | 8 |
| - Objective & strengths reflect Worksheet Examples: (1 point each.) | 2 |
| Page 7: Resume worksheet (p.2) | |
| - Three sections with entries: | 3 |
| - Entries reflect Worksheet examples: (1 point each) | 3 |
| Page 3: References: | |
| - Three <i>complete</i> work references: (1 each) | 3 |
| - Two-three partial references: | 2 max |
| - Two complete personal references: (1 each) | 2 |
| - One –two partial references: | 1 max |

2. CONTENT:

3. MANIFEST CAREER DEVELOPMENT LEVEL:

(Compare to stages in Maryland Career Development Framework)

There are six standards in the Maryland Career Development Framework:

1. Acquire and apply self knowledge to build and maintain a positive self concept.
2. Understand the Maryland Career Clusters and pathways, and their relationship to educational achievement and to life-long learning.
3. Assess Career Cluster choices and related pathways to develop an educational and career plan.
4. Prepare for postsecondary and career success through an academic and technical sequenced program of study and related workplace experiences.
5. Demonstrate skills to secure, maintain, and advance in their chose or related career cluster.
6. Demonstrate how ongoing attainment of knowledge and skills enhances one's ability to function and transition effectively in a diverse and changing economy.

Each of these has sub-indicators, and stages including PreK-grade 2; Grades 3-5, Grades 6-8, Grades 9-12, and Postsecondary (PS)/Adult.

4. VOCATIONAL NEEDS:

An additional track against which the content of the assessment package (and hence the student status) is assessed is the Educating For the Future (EFF) Content Standards produced by the National Institute for Literacy (Stein, 2001). As a career development tool, it contains a role map for three roles: *citizen/community member; parent/family member; and worker*. The EFF

Standards include four fundamental categories of skills:

Communication Skills
 Read with Understanding
 Convey Ideas in Writing
 Speak So Others Can Understand
 Listen Actively
 Observe Critically
 Decision Making Skills
 Solve Problems and Make Decisions
 Plan
 Use math to Solve Problems and Communicate
 Interpersonal Skills
 Cooperate with Others
 Guide Others
 Advocate and Influence
 Resolve Conflict and Negotiate
 Lifelong Learning Skills
 Take Responsibility for Learning
 Learn Through Research
 Reflect and Evaluate
 Use Information and Communications Technology

The consultation report specifies which of these EFF standards are clearly illustrated in the students e-assessment package, which are hinted at or marginally developed and therefore need further illustration, and which are missing and need development work.

team of evaluators dedicated to this project monitors requests and can send out backup tools for students who do not have some of the information they need to complete segments of the package. For example, there are backup interest surveys, values and temperaments exercises, and web refer-

ences to skill and aptitude on-line tests that the students might want to access. *It has become important to encourage students and their advisors* that they do not need to try to submit a "perfect" assessment package, but instead submit as much as they have or know, and let the CAS professionals pro-

vide consultative suggestions for exploration, tryout, evidence collection, and revision over the course of several years.

When a completed assessment package is submitted, one of the transition team members reviews it and immediately prepares an evaluation of its status and a

consultation on next steps for the student. "Next steps" could include sending out back-up assessment tools, suggestions for how to finish incomplete segments, or how to improve segments, suggestions for more or better evidence of skills, or suggestions for methods of career exploration in chosen areas. The following is the assessment package evaluation tool to help summarize its status:

The advantages

Some of the predominant advantages of the Progressive Career Assessment pilot model include: Career assessment and career development are blended over a period of time that allows the student's development, choices, actions, and consequences to be incorporated into the assessment; Divergent pieces of assessment currently done in schools but often lost in the jumble of school assignments or compartmentalized administrative records get utilized in a central format that can be used for planning; The process is flexible and can use many naturalistic settings and experiences to demonstrate student preferences and abilities; It eases the pressure to produce last minute assessments and career transition plans for exiting students.

Obstacles

The experiences with this pilot have shown some significant obstacles to its effectiveness: Many students with disabilities are less technologically adept than adults might assume, and need much assistance in accessing and converting their information to electronic format; They often don't have access to email while at school; School staff and even rehabilitation counselors involved with the project have their own levels of unfamiliarity with electronic formats, moved slowly to explore and use the system, and often needed a career assessment specialist to lead them through the assessment package with students in order to break the ice. School staff already loaded with administrative responsibilities for their students sometimes viewed this as simply another demand project rather than as an assist in doing their jobs; Students often delay work on activities that look like assignments, and once they have the e-assessment package, required vigorous follow up to submit even partially completed products.

II. Some alternative assessment procedures

A second illustration demonstrates applying other assessment methodology including RTI, the "Rule of Seven" and learning graphs for a group of Certified Nursing Assistant program applicants. This kind of data fits usefully within the e-assessment process described in Part I above, as a type of Evidence of Skills. Follow-up with the sample of CNA applicants tracked recommendations, admissions, and successes for the training.

In this sample, four applicants received "focused" assessment related to their applications for a customized training program at the WTC for Certified Nursing Assistant. Three of the four were transition-aged students, who had recently exited high school. The fourth was an adult with a disability who was re-entering the work force and who had received some short term experience as a nursing assistant-in-training many years earlier. Other characteristics such as age, known I.Q., and reading grade level of the applicants are listed following the aggregate graphs.

First, as a preliminary exercise, the applicants were given a task utilizing the "Rule of Seven", an applied psychology principle which suggests that most humans have hard-wired brains designed to respond to "seven" instances. For example, the average person has an immediate recall of seven digits or bits of information; advertisers know that the average person needs to hear/see a commercial seven times for it to register in consciousness above the usual media din; the average person needs to lay down a base of seven repetitions in beginning to learn a new habit.

In this task, all four candidates either did not know their social security numbers at all or only partially knew them. They then received a legal-size ruled paper with the following format (numbers 1-9 are used to simulate their social security numbers):

```
1 - 2 - 3- 4 -5 - 6 - 7 - 8 - 9
-----
_ 2 _ - _ - _ - 6 _ 8 _
1 _ _ - 4 _ - _ 7 _ 9 _
_ 2 _ 3 _ - _ 5 - 6 _ 7 _ _
1 _ _ 3 _ - 4 _ - _ _ 8 _ 9
-----
```

The instructions were to copy the numbers into the first two lines. Then folding the top down and bottom up to reveal only one line at a time, they were to fill in the blanks for each line. By the time they reached the last line (the 7th instance) all the candidates filled in their numbers without "peeking". They were then asked to recite it aloud, all successfully. They were told they'd be asked later, and their numbers were requested from them in ten-minute, one hour, and half day delayed conditions. All were successful and demonstrated that the Rule of Seven could be applied to discrete aspects of learning for them. This is the "Intervention" in Response-To-Intervention (RTI).

The next phase involved more complex relevant content. From the training textbook for Certified Nursing Assistants, two samples of important information were selected: One was 1 of 3 pages of Medical Abbreviations and Definitions from the front of the book. The second was chapter seven on Communication with diverse clients. Similar RTI assessment technology was applied to both tasks, with abbreviations given first. There were several short intense study periods, ten minutes for the abbreviations, 20 minutes for the chapter. These were followed by requests for open recall on blank paper of as many abbreviations & meanings, or elements of the chapter, as could be remembered and written in a short time. Although short time limits were in place (about ten minutes for recall), by observation the candidates had stopped writing before the end of the limits. After checking but not correcting their answers against the text, the abbreviations received a second identical trial, whereas the chapter text was addressed through a short objective test (multiple choice, completion, true/false). There was then a one hour delay period.

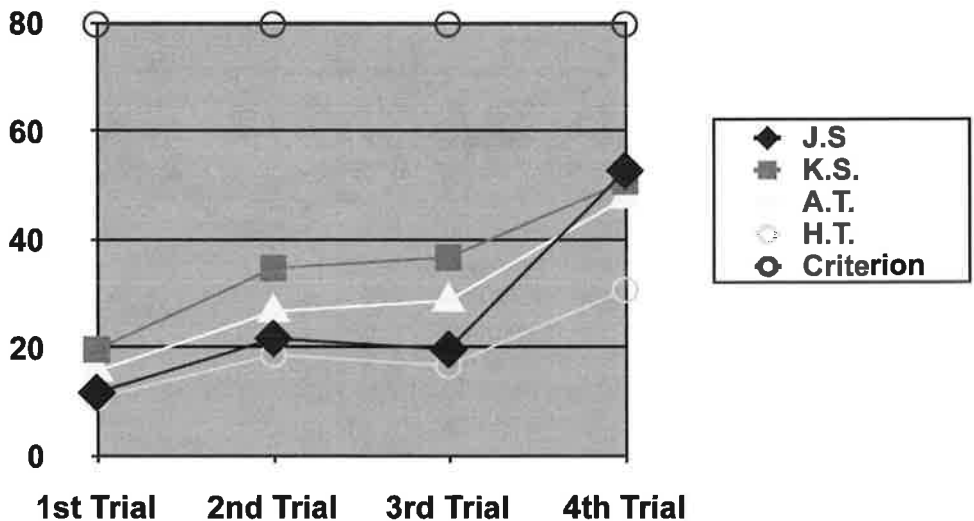
After this the candidates had some discussion about how they thought they learned best - reciting while studying, taking notes, standing & walking, etc - and then were given the same short study periods where they could use their study habits relatively freely. They again performed the abbreviations test under open recall conditions.

Finally, there was an overnight delay condition, with a reminder about study methods, similar periods of study, and objective

tests for both components. (Abbreviations involved the entire abbreviations page with either the abbreviation or the meaning

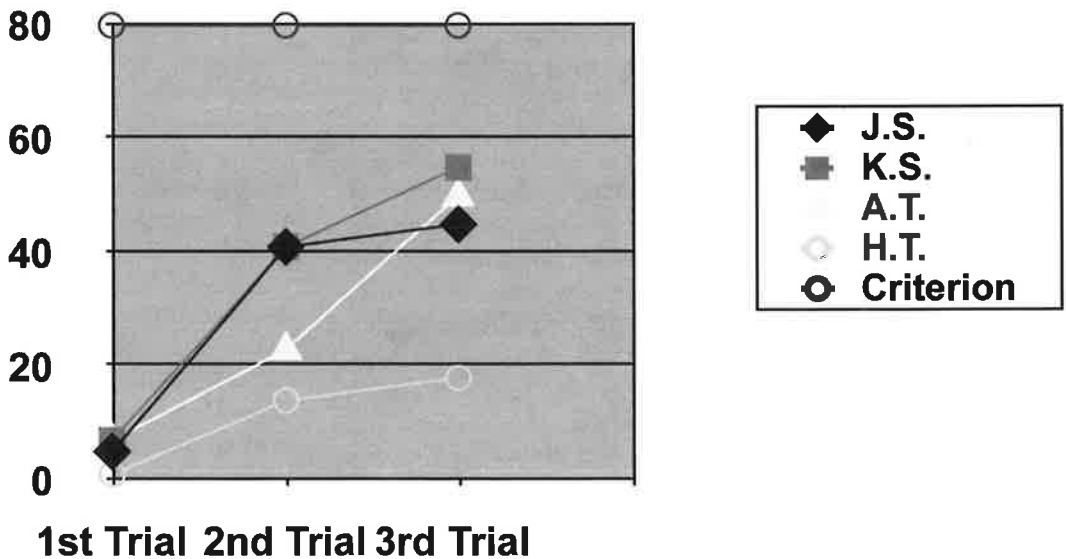
missing). The results of the four trials for the abbreviations and three trials for the chapter were graphed, in terms of *percentage of accuracy*.

Medical Abbreviations and Meanings



[Open Recall.....Delay.....] [Completion, Overnight delay]

Textbook Chapter on Communication



| [Open recall] [Objective Test]{Delay}[Objective Test] | J.S. | K.S. | A.M. | H.T. | |
|---|-------|-------|------|-------|-------------|
| Age | 38 | 17 | 19 | 17 | |
| IQ | 68-75 | 89-93 | ??? | 69-74 | |
| Reading | 6.6 | 10.6 | 5.8 | 3.7 | Grade Level |

Under ideal conditions, seven trials of each would have been attempted, as an application of the Rule of Seven; unexpected scheduling constraints prevented doing this. As a result, the graphed results were viewed with hypothesized results over seven possible trials; the target was an objective criterion of 80% success which would have been the same criteria for success in the training program. The graphs, as a function of RTI, were evaluated on whether their *Learning Rate* and *Level of Performance* could have been projected to reach the Success Criterion over seven trials.

Candidates J.S., K.S., and A.M. had slopes suggesting they had potential for success, although J.S. was curving off on the text and appeared more marginal. All three also demonstrated motivation, and were recommended for training. Only H.T. showed a relatively flat slope and very low performance level, and was recommended to receive other interventions than CNA training. On follow up, only K.S. was accepted for training (the other two were excluded for reasons not related to their learning potential) and successfully completed training.

The methodology applied in the illustration above could also be applied to Functional Vocational Evaluation of prevocational skills, employability skills, work adjustment or employee development training outcome measurement, or similar situations.

Discussion

The Transition e-Assessment Pilot initiated in February 2006, and was hampered by both students' restricted access to email and rehabilitation counselors' inhibitions about trying to introduce something inno-

vative to their respective school staff. Although the counselors did not have to actually operate or teach others how to operate the package (their role was to encourage students, teachers and parents to electronically acquire the package and use the staff support from WTC) they felt uncertain about their role and hesitated to ask further questions until the press of late spring. However, several school staff did introduce the package to students at their school, and asked questions and suggested improvements that were accepted. The school staff and the students used the components of the package internally but did not submit packages for evaluation during that year.

It was reintroduced to several schools directly by the evaluation staff in the present year. Currently about 30 students from ninth through twelfth grades have the assessment package and are working on it, in conjunction with teachers, school transition coordinators or parents. With further follow up, it is expected that over 100 students will be working on the package components by late spring. Students can continue to work on this, and to receive consultative help, over the summer. Several schools have asked for more training for their staff and indicated that they are beginning to see the value of the approach. This has been a slower than expected response overall, but it has clarified that rather than simply being a technology to adopt, this progressive form of career assessment has introduced a systems change procedure that will take more time to percolate through the interfaced educational and rehabilitation communities responsible for transition planning.

A few other significant points are worth noting. Students may request help with

pieces along the way: an interest survey here, a skills test there, a work sample evaluation later. Students may begin working on this progressive career assessment before they have become registered Rehabilitation Services consumers. It has been a priority of Maryland's state VR agency to serve more transitioning students and with higher quality services, and the agency has courageously taken the risk to go outside the standard enrollment process to reach the students. The feedback loop in the progressive assessment is that students who become identified as working with this career assessment package can be identified to their responsible rehabilitation counselor for follow up and possible future enrollment.

Summary

This paper has described a form of career assessment involving progressive steps inclusive of career development standards, vocational evaluation principles, student development over lengthy time periods as part of the assessment process, and inclusion of new methodologies to discover and illustrate student career abilities and aptitudes, from student-provided work illustrations to Response-To-Intervention technologies. It has the potential to open the assessment process to a wider range of students, integrate career assessment experts into the school transition planning process, and find new ways to maintain the pre-eminence of work in vocational evaluation. At the same time it needs further hard evaluation of the limits of its usefulness in the real world of schools and of work.

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