

Transforming Futures: Research on Expanding the Career Aspiration of Youth with Mental and Emotional Disorders.

Introduction

Transforming Futures is a research project that will modify a current best practice (e-mentoring) and augment it with a website intended to enhance the recovery of youth and support their parents by providing information, role models and personal support. *Transforming Futures* will be informed by the research conducted through *R-1 Voices of Youth and Families: Community Integration of Transition-Age Youth* and will use the findings from that study as a basis for the content of both website and e-mentoring approach. This project will rigorously test the effectiveness of e-mentoring as an intervention for expanding the career aspirations and sense of self efficacy of youth with mental and emotional disorders. According to the Surgeon General's Report (U. S. Department of Health & Human Services, 1999), the restoration of hope for the future, self esteem and a meaningful role in society are some of the key components of recovery.

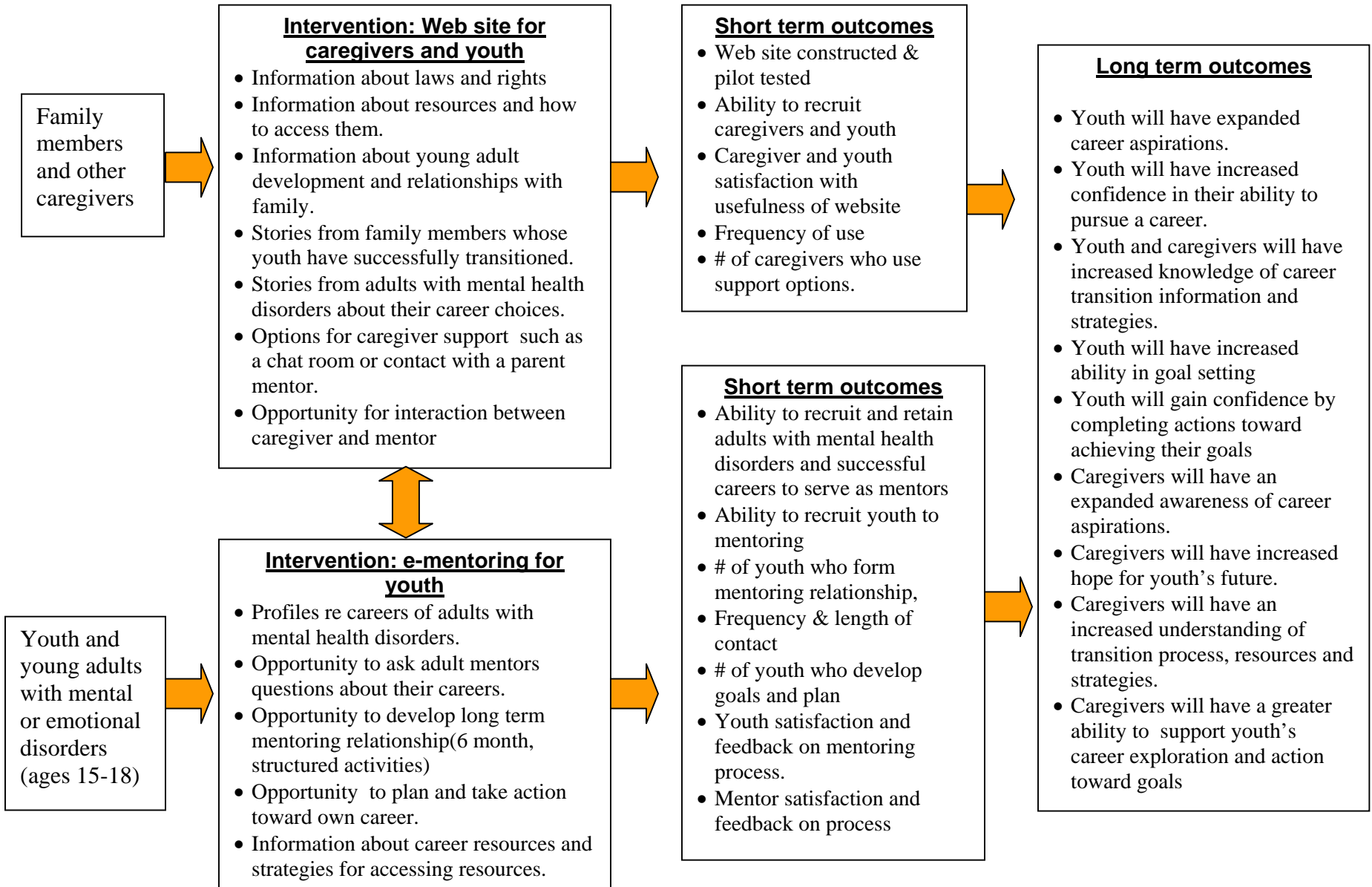
Research into the lives of youth with mental and emotional disorders as they move into young adulthood suggest that their integration into normal community activities and roles is catastrophic. "By young adulthood about 30% experience homelessness, the rate of school dropout, unemployment, serious drug or alcohol problems and pregnancy hovers around 50% and by age 25, up to 65% have been arrested. In essence, they are failing in every domain of adult functioning" (Davis, 2004).

Youth with mental and emotional disorders, when compared to their peers without these disorders, have lower academic achievement, lower high school graduation rates, limited post secondary participation and fewer employment opportunities (Armstrong, Dedrick & Greenbaum, 2003; Davis & VanderStoep, 1997). All of these are factors that result in young adults who face many challenges to the normal process of becoming independent and assuming a positive role in the community.

By the time youth with mental and emotional disorders approach transition, their parents and other caregivers may have a very low estimation of what they will be able to accomplish as an adult. Families are often demoralized by the criminal activity and substance abuse of youth and view them as having few skills and limited ability to work. Arnett (2000) suggests that as youth begin to separate from their families and establish independent lives, their relationship with family members may naturally be strained. These normal tensions are exacerbated by the parents concerns about high-risk behaviors and the need to shelter the young person from stressful experiences (Davis & Butler, 2002; Davis & Vander Stoep, 1997). In a study of parents perception of the service system for transition aged youth, Davis & Butler (2002) reported that one of the major barriers to receiving services was the stigma that youth associate with the label of being mentally ill. A second barrier cited was the lack of services that focused on issues relevant to the youth such as finding employment.

The intervention proposed here, *Transforming Futures*, is based in social learning theory and combines elements of information giving, social support, and role modeling to help youth with emotional and mental health issues increase the range of careers they consider, including those that require post-secondary education, and take concrete steps toward achieving those careers. *Transforming Futures* maximizes the resources available to the youth from their parents and other caregivers by providing them with information about transition and career resources, by giving youth positive role models of adults with mental illness who have interesting and varied careers, and by helping caregivers understand the best ways to support their youth.

Figure (R-2.1) Transforming Futures Logic Model



Literature Review

One factor that has contributed to the poor transition outcomes for youth with disabilities, is the fact they are prone to low educational and career aspirations (Rojewski, 1996; Rojewski, 1999). Research has demonstrated the impact that career aspirations have on future occupational attainment (Holland, Gottfredson, & Baker, 1990; Rosenbaum, 1981). Rojewski (1996) found that adolescents without learning disabilities were more likely to hold aspirations for high prestige occupations (female = 71.6 %, males 59.5 %) than were young people with learning disabilities (female = 47.5 %, males 29.5 %). The percentage of adolescents with learning disabilities who did not aspire to postsecondary education was almost three times that of adolescents without disabilities. The low rate of involvement in post secondary education by youth with mental health disorders has been reported (Malmgren, Neel & Edgar, 1996).

Research has clearly established the impact that parental aspirations and expectations have on the career choice behavior of youth with and without disabilities (Anderson, Mawby, Miller, Olson, 1965; Chubon, 1985; McBroom; Tedder, & Kang-Ji, 1992). Adolescents consult their parents frequently for career-related advice (Birk & Blimline, 1984; Dowdy, Carter & Smith, 1990; McNair & Rusch, 1987). Overprotection and low expectations for their children can have a significant impact on the career aspirations of adolescents with disabilities (McBroom, et al, 1992). Brotherson, Berdine & Sartini (1993) suggest that a partial explanation for the failure of some transition programs may lie in their failure to build a more active role for parents.

Mentoring is an approach that has been identified as a promising practice for enhancing the transition of youth with disabilities, as well as those who experience other challenges (Astroth, Brown, Poore, & Timm, 2002; Center for Youth Development and Policy Research, 1996; Edelman, Gill, Comerford, Larson, & Hare, 2004; Ferber, Pittman, & Marshall, 2002; National Research Council and Institute on Medicine, 2002; National Youth Employment Coalition, 1994; Woyach & Cox, 1996). Mentorship is broadly defined as a process in which an experienced person conveys knowledge, skills, or emotional support to a mentee or protégé (Blechman, 1992).

Research about Mentoring Programs for Youth without Disabilities

A number of studies have identified mentoring and mentor program factors that contribute to their effectiveness (Sipe, 1999). In addition, a number of organizations and programs have summarized mentoring and mentor program “best practices”. These agencies include The National Mentorship Partnership (2004, June 20), and the National Mentoring Center (2004, June 20). Not surprisingly, a key factor is the relationship between the mentor and mentee. A number of studies have found that the extent to which youth trust and connect with the mentor is critical (Grossman & Tierney, 1998). Research and experience suggests that trust is enhanced if the youth relates to the mentor based on shared characteristics (e.g., gender, race, disability), the youth participates in choosing the mentor, and the relationship develops over time and naturally (Ensher, & Murphy, 1997; Johnson, 1998; Network Training and Research Group, 1996; Powers, et al.1995; Rousso, 1988; Sipe, 1996).

Another critical element is that the mentor and mentee communicate regularly and frequently (Johnson, 1998; Morrow & Styles, 1995; Van Patten, 1997). Most experts and research suggests that once a month is minimal, and more frequently is advisable. Other programs have advocated that it is

helpful for youth to have the opportunity to interact with multiple adult role models, but that this does not take the place of the regular and enduring relationship with one mentor (Kizilos, 1990; Marchetti, 1997).

Yet another key factor for successful mentoring is the involvement of the mentees' parent(s) or other key adult in a custodial role (Johnson, 1998; Morrow & Styles, 1995). Researchers and program developers point out that the mentor can model for parents what is possible for their child and encourage them to support their child in making the behavior change focused on in the program. Finally, mentoring program experts consistently emphasize and research reinforces, the importance of providing training and on-going support for mentors (Network Training and Research Group, 1996; Sipe, 1996).

Research about Mentoring Programs for Youth with Disabilities

A number of mentoring programs targeted to youth with disabilities have been developed (Patton, 1985; Rousso, 1988). However, there have only been two published studies that provided empirical validation of the efficacy of mentoring for youth with disabilities (Moccia, Schumaker, Hazel, Vernon, & Deshler, 1992; Powers, et al, 1995). Moccia et al. (1992) found that the outcomes for the students with mentors were generally higher than those of the comparison group with the exception of the employment rate. Powers et al (1995) reported increased disability self-efficacy, more knowledge of strategies for promoting community integration, and a high level of confidence on the part of the parents as a result of mentoring.

Research on E-Mentoring

E-mentoring follows the pattern of person-to-person mentoring closely except that all exchanges are conducted electronically. The recent growth in e-mentoring suggests that it has certain benefits. E-mentoring can allow for national recruitment of mentors and the involvement of mentors who might not be able to participate in a traditional, face-to-face program, because of their geographic location, transportation issues, their work schedule, home obligations or a disability. E-mentoring also can make it possible for much more frequent interactions between mentors and mentees. Finally, it is an excellent way to enhance a young person's writing, reading, keyboarding and online researching skills.

Experts in the area of mentoring point out that the characteristics of effective mentoring program apply to e-mentoring programs (Bennett, Hupert, Tsikalas, Mead, & Honey, 1998). These characteristics include adequate training for mentors; clear program guidelines for both mentors and mentees; and program staff who are available to help mentors answer questions and address issues for mentees. On-going facilitation and monitoring by project staff is also critically important because of the perceived and real concerns related to the inappropriate use of the internet by either mentors or mentees. As in any program it is necessary to carefully screen e-mentors for criminal history backgrounds. It is also important to have the means for project staff to monitor activity between mentors and mentees to help insure safe interactions and to protect mentors from allegations of inappropriate behavior (Pallof & Pratt, 1999).

There are a number of e-mentoring programs that specifically target children and adolescents with disabilities. E-Buddies, perhaps the best known of these programs, primarily pairs college age students who do not experience disabilities with middle and high school students with intellectual

disabilities (Best Buddies, 2004). The Do-It (Disabilities, Opportunities, Internetworking, and Technology) program links mentors, many of whom have disabilities, with teenagers with disabilities to support their academic, career, and personal goals (Burgstahler & Cronheim, 2001). The Connecting to Success program was conducted through the Institute on Community Integration at the University of Minnesota and focused on transition issues. Youth with disabilities were paired with caring adults (Institute on Community Integration, 2004). Career Journeys is an e-mentoring project developed and studied at the Center for Self Determination and focuses on expanding the career knowledge and aspirations of youth with disabilities to include less stereotypical careers (Sowers, 2004). Although many of these projects may have included youth with mental or emotional disorders, especially those with ADHD, no project has demonstrated the acceptability of e-mentoring for youth with mental or emotional disorders or assessed its impact on these youth's transition outcomes.

The purpose of the proposed project is to conduct the first rigorous study to assess the impact of a targeted website and associated e-mentoring on youth with mental health disorders and their caregivers. Through Transforming Futures, youth with mental and emotional disorders will learn about and be mentored by adults with mental health disabilities who work in a wide array of careers and occupations. If funded, this project will be the beginning of a stream of research intended to empirically evaluate the effect of e-mentoring on the recovery of youth with mental and emotional disorders.

Hypothesis and Research Questions

Research Question 1

To what extent will youth with mental health disorders engage with an e-mentor and find the website information and e-mentoring process useful to their development of career plans.

Research Question 2

To what extent will caregivers of youth with mental health disorders find the website information and exposure to adults with mental health disorders who act as mentors useful to their understanding of transition and support of the career aspirations of youth with mental health disorders?

Research Question 3

To what extent does exposure to multiple role models of adults with mental health disorders who work in a variety of careers, one-to-one mentoring, and parent involvement via the internet, impact the career aspirations, career confidence, knowledge of career transition information and strategies of youth with mental health disorders.

Hypothesis. Youth who participate in the *Transforming Futures* Project will make significant gains on measures of career aspirations, career confidence, knowledge of career transition information and strategies, and show significant differences from the youth in a comparison group post-intervention.

Research Question 4

To what extent does being exposed to multiple role models of adults with mental health disorders who work in a variety of careers, obtaining information about transition and how to support their children's career aspirations and goals, and impact the perceptions of caregivers toward youth's career aspirations and hope for their future.

Hypothesis. Caregivers, who, along with their children, participate in the *Transforming Futures Project* will make significant gains on measures of their career aspirations for their children, positive feelings about their child's future and their ability to provide support for their children career aspirations, and show significant differences from the caregivers in the comparison group at post-intervention.

Research Question 5

Does enhancement of youths' career aspirations, confidence, and knowledge of information and strategies about career transition impact their career goals, plans, and outcomes?

Hypothesis. Youth whose career aspirations, confidence, and knowledge of information and strategies about career transition are enhanced as a result of participating in the *Transforming Futures Project*, will make significant gains related to their career goals and plans, and show significant differences from the youth in a comparison group at post-intervention. Measures will include type, clarity, and number of goals and steps in their plans completed.

Research Methods

The purpose of this study is to evaluate the impact of a web-based information and mentoring program called Transforming Futures, the elements of which have been derived from the relevant literature on effective mentoring practices for youth with and without disabilities. The key elements of the program are:

- 1) Youth aged 15-18 with mental health disorders of transition age and their caregivers are given access to the *Transforming Futures* website. All information on the website is open to both groups and language and structure of the website will underscore the commonality between hopes and concerns.
- 2) Adults with mental health disorders who work in a wide array of careers will serve as mentors. Their career profile and pictures will be posted on the website for youth and caregivers to read.
- 3) Mentors are trained by research staff using a guidebook that clearly identifies their roles and responsibilities, and how to effectively mentor youth regarding career issues.
- 4) Mentors are provided with on-going training on transition-related issues and topics, and how to effectively mentor. Most of this training will be provided electronically.
- 5) After learning about and communicating with a number of the mentors, each youth mentee chooses a single mentor she or he would like to have as his or her "one-to-one" long-term mentor.
- 6) Research staff train and support the mentees about how to use the website to communicate with mentors, about rules and responsibilities in using the site and being in the program, and in "using" the mentor (e.g., types of questions to ask).
- 7) Mentees and mentors meet (via the site) at least weekly and continue their relationship for a maximum of six months.
- 8) "Career Tips and Hints" are posted on the site, and mentees and mentors discuss a new one each week.
- 9) Mentees and mentors focus their interactions on identifying career-related goals and planning around achievement of these goals.

- 10) Caregivers for each youth learn about Tips and Hints for supporting their son or daughter's career transition, and join the electronic discussion with the mentor and mentee monthly.
- 11) The caregiver has access to information about transition, adolescent development and career development resources. The caregiver also has the option to interact with other caregivers via a chat room linked to the website.

Intervention Condition

The actual substance of the intervention will be developed after the findings from the companion project (*Voices of Youth and Families*) have been synthesized. The principal investigator and project manager for *Transforming Futures* will be members of the research team for *Voices* and will have input into the data collected in that project. Special emphasis will be placed on gaining input from families from diverse racial and ethnic backgrounds in that project. Additional input will be obtained from national and local advisors, including family members and youth. Based on the experience of other e-mentoring projects, it is likely that the profiles and photos of at least 15 mentors who experience disabilities similar to those experienced by the youth, and who work in a wide array of careers will be posted on the *Transforming Futures* webpage. Mentors who have professional and nonprofessional careers will be represented. Each of the mentors' profiles will include personal information (e.g., age, hobbies, disability), job description, how they got to where they are, job accommodations, and advice to youth and how to achieve their career goals. The website will be built on a software platform that permits private mentor-mentor conversations through the site, rather than through personal emails. This feature permits the site managers to monitor exchanges and maintain a permanent record of all communication exchanges between mentors and mentees for data and safety purposes. It also allows youth who do not have email accounts to communicate with mentors through the web. The site will be fully accessible for text-to-speech users. Only youth and caregivers recruited into the study will be allowed access to the site via a personal password for login purposes.

Mentors will be recruited nationally by contacting national organizations for a range of professions and asking that the opportunity be publicized with their membership. Personal contacts will be made with large employers and a variety of businesses. National advisors as well as local family, youth, consumer organizations and service providers will be tapped to develop a widely based recruitment plan. Other techniques for recruiting mentors will be identified by talking with e-mentoring projects such as Career Journeys (Portland, Oregon) and Do-It (Seattle, Washington). We will place special emphasis on recruiting mentors from diverse racial and ethnic backgrounds so that mentees of color will be able to find mentors that are similar to them.

A guidebook will be developed or adapted from other mentoring projects and made available on-line. Mentors must read this material, complete and pass a quiz about the contents, and pass a criminal history check. The guidebook will include content on roles, responsibilities, rules of the program, and mentoring best practices. At least daily, the research staff will monitor the email exchanges between mentors and mentees. When staff notices that a mentor may need support in interacting with a mentee, e-mail or phone contact will be made to talk about the issue. A set of instructions for mentees will also be developed or adapted and made available on-line. It will include a description of mentee roles and responsibilities, program rules, and how to effectively work with a mentor. Each youth will take a short quiz at the end of this training to reinforce the key elements of the program.

Initially, a researcher will arrange a weekly face-to-face meeting time and place with each youth. In order to increase the likelihood of consistent and long-term participation, we will work with the youth and his or her parent, special education teacher(s) and case manager(s) to build the meeting into the young person's school schedule. If this is not possible, the researcher will meet at a time and place convenient to the youth, including his or her home, a youth services program or at the Regional Research Institute. The researcher will bring a lap-top computer with wireless internet capabilities to the meeting in order to insure that the mentee will have access to and be able to get on to the computer and website. During these initial meetings the researcher will also collect baseline data from the youth. The researcher will meet with the youth on a regular basis to help them get oriented to the website, review the mentor profiles and choose a mentor. Once the youth begins interacting with the mentor, the research staff will maintain contact by e-mail and telephone.

During the first meetings, youth will be encouraged to read the profiles of all or most of the mentors. The researcher will also ask them to choose a number of mentors and to have Internet conversations with them. Each youth will receive support to ask the mentors questions about their jobs, why they chose their career area, accommodations and challenges they encountered in achieving their career and how they met these challenges. After the youth has had a chance to have conversations with a number of mentors, they will be asked to choose one mentor who they would like to ask to be their individual mentor for the remainder of the year. They will also be asked to choose two other mentors to invite to be their mentor if their first choice is not available.

After the mentee-mentor pairs have been established, each mentor will support his or her mentee to identify and accomplish career-related goals, plans, and action steps. Posted on the site will be simple goal and plan sheets for the mentees and mentors to work together to complete. The mentor will support the mentee to identify one career-related goal. For example, a young person who thinks that she or he may be interested in some type of health care career may be encouraged by the mentor to set a goal "To explore at least 5 health care careers". The mentor will help the mentee identify a plan with action steps, timelines, and supports needed to accomplish the goal. The mentee will give the mentor updates on his or her efforts in completing the plan and discuss difficulties and possible strategies for overcoming these. When the first goal is completed, they will begin working together on another goal. During each electronic meeting the mentee will choose one of the "Tips and Hints" to discuss with the mentor the following week. The mentee will tell the mentor which "Tip or Hint" she or he has chosen so that the mentor can read or review the same one and be prepared to discuss it with the mentee the following week.

The youth's caregiver will be included in one electronic meeting between the mentor and mentee each month. The mentee will take the parent to the "Family Hints and Tips for Supporting Youth's Career Goals" where a new Tip and Hint will be added each month. The caregiver will then "listen in" on the conversation between the mentee and mentor about the mentee's progress in achieving his or her goal and plan. They will identify ways in which they can support the mentee to achieve their goal and plans, and will have the opportunity to ask the mentor questions and discuss issues.

Comparison Condition

Of the 30 youth recruited into the project for the 07-08 project year, 15 will be randomly assigned to the comparison condition and 15 to the intervention group. Youth assigned to the

comparison group will have three meetings with a researcher for the purpose of orienting them to the website and making sure that there are no technical access problems. The researcher will help the youth locate the mentor profiles and the “Hints and Tips”. They will also encourage them to identify and complete goals, plans, and action steps. The staff person will make sure parents have access to the website and can locate the “Family Hints & Tips”. However, the youth and family in the comparison group will not be able to communicate with the mentors or with other caregivers in the study.

Research Design

During 2006-2007, (Year 3 of the RTC) 15 youth with serious mental health disorders and their caregivers will participate in the *Transforming Futures Project*. During this year the primary focus of the project will be to address research questions 1 and 2 (usefulness of website and engagement with mentors) and to make a preliminary assessment of the impact of the intervention on outcomes. Systematic qualitative data will be gathered from youth, caregivers and mentors at the end of this year to identify modifications that need to be made to the intervention as well as anticipate barriers and challenges. During 2007-2008 (year 4 of the RTC) 30 youth and caregivers will be recruited to the project. Fifteen of these youth will be randomly assigned to the intervention and 15 will be assigned to the comparison group. The focus of this year will be to answer research questions 3-5 and the associated hypotheses. If no major changes are made to the intervention during the second year, the two intervention groups will be combined giving us a sample of 30 youth for whom we will have pre-post data on outcomes and whose outcomes can be contrasted with the 15 youth in the comparison condition. The data from these two phases will provide the basis for developing a proposal for federal or foundation funding to test the intervention with larger numbers of youth.

Sample Description and Recruitment

Youth will be eligible for the project if they are considered seriously emotionally disordered using the definition identified in the Comprehensive Community Mental Health for Children and their Families Program. These criteria include 1) youth has an axis V/GAF of 50 or below, 2) youth is in or needs multiple services, 3) youth has a diagnosis, and 4) youth has been in services for 1 year or is expected to be in services for at least a year. Youth will be recruited who are enrolled in Portland Public School or in the Vancouver Public Schools and who are expected to graduate in approximately 2 years (ages 15-18). Researchers at the RRI have a history of collaborations with both ESD 112 (Vancouver, Washington) and Portland Public School district. Both have expressed interest in the project and believe that they could help to identify and mail to these students and their parent a study description, invitation to participate, and return interest card. (See letters of collaboration from Columbia River Mental Health Center.) If this does not generate sufficient numbers of youth who wish to participate in the project, other school districts in both Multnomah County Oregon and Clark County Washington will be offered the opportunity. We also have research relationships with the Partnerships for Youth Transition Project (Vancouver, Washington) and social service and mental health entities in both Washington and Oregon. Since many youth with behavioral and emotional disorder drop out of school, we will explore recruiting youth from these sources as a way of diversifying the sample. Because both Vancouver Washington and Portland Oregon are large metropolitan areas, we expect that we will be able to recruit participants that are from diverse ethnic and racial backgrounds. We will monitor the recruitment process carefully to assure diversity among the participants.

Youth and their parent or other adult who serves in a custodial role for the youth will undergo full informed consent, including being provided with an in-depth description of the research, the procedures, risks, safeguards, and benefits of participation. Only those youth under the age of 18 who assent to participate by signing the consent form, and whose family, legal guardian or custodian sign an informed consent form for the youth and himself or herself to participate in the study will do so. If a youth is over age 18 they will be allowed give their own consent with caregivers consenting separately for their own involvement.

Data Collection and Instrumentation

For the youth and caregivers in the intervention and comparison groups, we will collect demographic data prior to intervention. Satisfaction data will be collected from youth, parents, and mentors at mid-point by e-mail and by interview at the end of six months. For youth, we will collect data pre-and post-intervention on their career aspirations, career confidence, their knowledge of transition information and strategies that they can use, their career goals and plans, and the presence and content of career goals and plans on both their IEP and Individual Transition Plan—if these are available. For the families we will collect data pre- and post intervention data on their career aspirations for their children, their perception of how to support their children’s career transition, and their knowledge of transition information and strategies.

Measures

Youth. The following demographics will be collected on the youth: age, ethnicity and race, mental health diagnosis, gender, academic standing and degree of inclusion (e.g. attends all regular education classes, attends some regular and some special education classes, attends all special education classes). Data will be obtained from youth and family interviews conducted pre and post intervention. We would like to add a measure of hope to this set of measures but have not yet identified an appropriate one. We will continue to search for such a measure.

Career Aspirations

The Mapping Vocational Challenges (MVC) is a computerized self-report assessment instrument developed for youth without disabilities (Lapan & Turner, 1997; Turner & Lapan, 2002). The MVC consists of the titles of 90 occupations, 15 for each Holland occupational theme (Holland, Gottfredson, & Baker, 1990). The themes are: Realistic (trades), Investigative (mathematics and science), Artistic, Enterprising (person-oriented business professions), Social (helping professions), and Conventional (data-oriented business professions). The 90 occupations are presented sequentially to the participant, who is asked to rate his or her interest level on a 3-point Likert-type scale (1 = low interest, 3 = high interest); their efficacy expectations on a dichotomous scale (0 = I do not have confidence I could do this type of job, 1 = I have confidence I could do this type of job); their perceived gender-typing of the occupation on a 5-point Likert-type scale (0 = mostly men, 4 = mostly women); and their perception of parent support on a dichotomous scale (0 = My parents would not support me in pursuing this occupation, 1 = My parents would support me in pursuing this occupation). For the purposes of this study, the gender-typing questions will be changed to disability-typing. They will be asked to rate the extent to which people with mental health disorders could do each job. We will also be ask to rate the extent to which they perceive that their mental health disorder would make it difficult to do each job. A 5-point

Likert-type scale will be used (0 = My disability would make it very difficult to do this job, 4 = My disability would not make it at all difficult to do this job). Internal consistency estimates for the career interests scales range from .70 to .76. For the career self-efficacy scales, internal consistency estimates range from .78 to .84. For the perceived parent support scales, internal consistency estimates range from .82 to .89 (Holland, 1990).

Career Confidence

Career Planning and Exploration Efficacy Scale (CPEE) of the Missouri Comprehensive Guidance Survey (MCGS). The CPEE is a 10-item measure of confidence for successfully engaging in one's own career exploration and planning (Gysbers, Multon, Lapan, & Lukin, 1992). Two examples from the CPEE are "I know how to explore careers in which I may be interested," and "I understand how to prepare for careers in which I may be interested". The CPEE is scored on a 7-point Likert-type scale (1 = low confidence, 7 = high confidence). Higher scores indicate greater confidence. Internal consistency estimates for the CPEE is .76.

Self-Efficacy

A modification of the Self-Efficacy Scale (Sherer, Maddox, Mercandante, Prentice-Dunn, Jacobs, & Rogers, 1982) will be used. This Scale is designed to measure general expectations of self-efficacy in task-related and social domains. The Self-Efficacy Scale demonstrates good internal consistency, criterion –related validity, and construct validity (Corcoran & Fisher, 1987). The Disability-Related Self-Efficacy Scale was developed by Powers, Sowers, & Stevens, 1995 to measure the extent to which youth believed that they had the capabilities to achieve desired outcomes made more difficult by their disability. This 8-item scale was adapted from the Self-Efficacy Scale and included item such as "When something I like to do is hard for me because of my disability, I cannot do anything about it". Field-testing of the instrument has yielded a standardized item alpha of .76 and correlated significantly with the Self-Efficacy Scale ($r=.50, p=.006$).

Career Goal(s) and Plans

Each youth will be asked at baseline and again at post-intervention to identify his or her career goal(s) and the plans and activities that she or he will do to reach this goal (s). A rating system will be developed to assess each of the following: (1) the specificity of the goal(s); and (2) the specificity of the plan (e.g., action steps listed, timelines, supports needed). Each occupation that the youth identify as under consideration will be recorded and classified. Research team members will be trained on the coding system until interpreter reliability is achieved.

Career Goal(s), Plans and Activities on the Individual Transition Plan

The youth and families will be asked to provide a copy of their Individual Education Plan and Individual Transition Plan in effect at baseline and at post-intervention. The IEP/ITP will be coded at baseline and post-intervention for the following measures: (1) presence of any vocational goal; (2) specificity of goal; (3) extent to which it matches the goals and plans identified by the youth and parents in the interview with the research staff; and (4) each occupation that is identified on the plans will be classified as "stereotypical" (e.g., food service, cleaning, etc.) or "not stereotypical". The purpose of

this measure is to determine the extent to which the career goals and plans developed in this project match those on the IEP/ITP. We will ask the youth and parents what they did or did not do to advocate for the career goals and plans on the IEP/ITP, and the experiences that they encountered in trying to make this occur. This information will be analyzed and reported qualitatively. Themes that emerge across participants will be identified, summarized and reported.

Knowledge of Career Transition Information

Youth will be asked to verbally describe as many pieces of information and strategies that can help enhance the success of their transition to a quality career. These will be scored based on the number of unique and accurate information bits and strategies described by the youth.

Youth satisfaction.

Information on youth perception of the intervention will be collected at regular intervals from both cohorts who receive the intervention. A short, e-mail survey will be administered to the youth midpoint through the e-mentoring process (about 3 months). These youth will also be interviewed in person or by phone at the end of the intervention. The purpose of the interview will be to gain input from the youth regarding the acceptability and accessibility of the intervention. Particular attention will be paid to any suggestions about how to make the intervention more “youth friendly”. Youth will also be asked about the impact of the intervention on their career choices and plans. Youth will provide feedback on the various components of the intervention, including the website, the mentors, their profiles, e-mentoring, the Hints and Tips, and caregiver involvement.

Caregivers. The following demographics will be collected on the parents or adult custodians: their relationship to the youth, gender, ethnicity and race, their educational level, their occupation, and their families’ income level.

The Mapping Vocational Challenges (MVC)

The MVC instrument (Lapan & Turner, 1997; Turner & Lapin, 2002) will be modified and administered to the caregivers. They will be asked to rate their confidence in their child’s ability to do each of the career areas and the extent to which they believe that their child’s disability would make it difficult to do these careers.

Caregiver Knowledge of Career Transition Information and Strategies

Caregivers will be asked to verbally describe as many pieces as possible of information and types of strategies that can help enhance the success of their child in transitioning to a quality career. These will be scored based on the number of unique and accurate information bits and strategies described.

Caregiver Satisfaction

An interview similar to that described for the youth will be developed and administered to the caregiver at the end of the intervention. The purpose will be to gain their input regarding the impact of

the intervention and the utility of each of its major components. Their perceptions of the accessibility of the website and the acceptability of the intervention to their youth will also be covered.

Mentor. The following demographics will be collected on the mentors: age, ethnicity, type of disability, gender, educational level, and career. Utilization data related to the mentors activity will also be collected via the website. This will include frequency and duration of mentor-mentee contacts and the time that elapses between contacts.

Mentor Satisfaction

An interview similar to that described for the youth and caregivers will be developed and administered to the mentors to gain their input regarding the impact of the intervention and the utility of each of its major components. Mentors will also be asked to comment on the challenges they faced as well as the positive aspects of the experience.

Data Analysis

Descriptive statistics. We will compute descriptive statistics (e.g., mean and standard deviation, frequencies, percentages) on each dependent variable for both pre and post test data collection. This data will provide us a summary of the study, a description of the participants and participant status.

Between group and within-group analyses. The change over time in the youth career aspirations, confidence, self-efficacy, type of career goal, knowledge, and clarity of career goals and plan will each be analyzed by comparing pre-and-post-test data for within-youth analysis (paired t-test). To examine difference between comparison and intervention groups, t-test of change scores will be used for continuous dependent variables and chi-square will be used for comparing changes in categorical dependent variables. If intervention and comparison group youth are comparable on designated demographic variables, it may be possible to compare post-test means for each variable, rather than change scores. In any case, because there are so many variables to be tested, a specific plan for testing hypotheses will be followed for each analysis to avoid overestimation of significance because of the number of tests run. The same approach to analyses will be used to assess the change over time on caregiver measures of aspirations, empowerment, and knowledge. Because of the small sample size, multivariate analysis will not be attempted.

Qualitative Analysis. The interviews with youth, caregivers and mentors will be tape recorded and transcribed for analysis. Qualitative analysis software will be employed to help track themes and organized ideas. Interview data from the 15 youth, caregivers and mentors involved in the first wave of intervention will be summarized immediately and used to inform the modification of the intervention for the second wave of participants. Data from both sets of interviews will be combined to provide a qualitative picture of the impact and acceptability of the website and e-mentoring intervention.

Youth and Caregiver Involvement

Three of the projects in this proposal (*R-1, R-2, & R-3*) are focused on issues related to transition-age youth and their caregivers. These three projects have agreed to share a single advisory group. This will allow all three project greater access to national and local advisors for less cost. This

Advisory Committee will include multiple youth and caregivers and is fully described at the end of the narrative for project *R-I*. We will emphasize the inclusion of caregivers and youth from diverse ethnic and racial backgrounds as we assemble the Advisory Committee. Because youth and caregivers will be local, they will be available to meet regularly with project staff. Caregivers and youth will be paid a stipend for their work. They will be intimately involved in making recommendations for and reviewing materials for website, providing input about the measurements that are developed and used, and in reviewing and helping to interpret data from the research. A youth researcher and family researcher will be employed on the *Community Integration* project during the first year of the RTC. We proposed employing these two researchers on an hourly basis during the second through fourth year of the RTC to allow them to regularly attend *Transforming Futures* staff meetings to inform the development process. A variety of youth and family members have been involved in the development of this proposal—primarily through discussion of the conceptual ideas and comments about potential procedures.

Project Team and National Advisors

Two regular RTC staff members will provide leadership to *Transforming Futures*. Dr. Nancy Koroloff will be the principal investigator for the project. She is a national expert in research related to transition aged youth with mental health disabilities and has led a number of research projects related to services for children with mental health issues. Mr. Lyn Gordon will be the project manager. Mr. Gordon is an adult consumer of mental health services and has two children who have required mental health support and are of transition age. Mr. Gordon is the project manager for Partnerships for Youth Transition, a CMHS funded demonstration project.

Two national advisors are particularly important to the development and conduct of this research. Dr. Maryann Davis, Center for Mental Health Services Research, University of Massachusetts Medical School, is a leading expert and research on transition services for youth with mental or emotional disorders. Dr. Davis has been instrumental in developing cutting edge systems of care for transition aged youth. Dr. Jo-Ann Sowers, Center for Self Determination at Oregon Health Sciences University has also agreed to advise the *Transforming Futures Project* and to share her resources. Dr. Sowers has developed and is studying “Career Journeys” an e-mentoring project for transition aged youth with all disabilities. Dr. Sowers has much experience with recruiting and training mentors, recruiting youth and working with leading software platform.

Training Activities

The *Transforming Futures Project* does not plan to produce major training products. There are, however, two possible training opportunities that may emerge from the materials developed for the intervention. First, the guidelines that are developed for mentors will be developed into a web-based product that could be useful to training mentors for similar projects in other areas. Similarly, the experience of our research staff in monitoring and orienting youth and families to the website, monitoring the e-mentoring exchanges and supporting mentors and mentees will be documented and compiled into a manual. This document will be available to train persons who might take on the “facilitator” role played by our research staff. We anticipate this role to be a natural one for special education teachers, vocational rehabilitation counselors, youth employment specialists, transition specialists or case managers. The mentor curriculum will be available at the end of RTC year 3 and the facilitator curriculum will be available at the end of RTC year 4.

Dissemination

The proposed research project will experimentally test the effectiveness of *Transforming Futures* in impacting youth's career aspirations, goals and plan. If the results are positive, we expect to take several steps toward disseminating this intervention. First, we would present a detailed description of the project including challenges in implementation to major conferences spanning several professional fields. These would include children's mental health, youth employment, education and special education. A youth, caregiver and/or a mentor would be co-presenters at each conference. Second, we would work to collaborate with a national organization (such as a national youth leadership organization or a national family organization) with the purpose of transferring the activity of sponsoring and maintaining the website, recruiting and training mentors and monitoring the e-mentoring process. Once e-mentoring is established as an evidence based practice, resources could be identified through corporate or federal funders or through a membership protocol. An alternative might be to help an e-mentoring project that already exists for other disabilities or for non-disabled youth adapt its procedures to fit the needs of youth with mental and emotional disorders. Once a solid sponsoring organizations is found, targeted efforts would be made to disseminate the approach to schools districts, Workforce Investment Act youth services programs, mental health programs and other agencies.

In addition to conference presentations and project related monograph and manuals, at least three manuscripts that describe the development of the project, the results of the study, and the experience of the "facilitators" will be written and submitted to peer reviewed journals. Youth will be included as co-authors on all publications. A summary of the project and its results, along with the Transforming Futures' URL will be described on the National Mentoring Project's website, the RRTC on Workforce Investment and Employment Policy at the Law, Health Policy & Disability Center website, the National Youth Leadership Network (NYLN), the National Assistance Center for Youth Transition (NTACYT), our own RTC website and through a variety of other websites focused on transition for youth with and without disabilities.

Technical Assistance

Transforming Futures is primarily a research project and is not intended to generate high demand for technical assistance. We do expect to provide technical assistance and the benefit of our experience to the national organization that might assume sponsorship. We would also provide technical assistance to web based support services and e-mentoring services designed primarily for youth with or without other disabilities. Our technical assistance may be useful to them in adapting their information and procedures to the needs of youth with mental or emotional disorders.

Timeline and Project Activities:

The timeline for this project is displayed on the following page. During the first year of the proposed RTC, Dr. Koroloff will be involved as a team member with the *Voices of Family and Youth* Project. In this capacity she will have input into the qualitative study of community integration and assure that data is collected that will inform the content of *Transforming Futures*. *Transforming Futures* is intended to start in year two of the RTC. During that year, staff will develop the website materials, adapt the mentoring materials, develop a protocol for recruiting both mentors and mentees and develop training

materials for both groups. By the end of year two the website will be up and ready for pilot testing and we will have begun recruiting both mentors and mentees. During year three the intervention will be delivered to 15 youth, data collected and analyzed and modifications made to the intervention. During year 4, the intervention will be delivered and data collected from an additional 15 youth. The comparison condition will be delivered and data collected from a third set of 15 youth who will serve as the control group. Dissemination and technical assistance activities will begin at the end of year two and continue throughout year 5.

Table (R-1.1) Community Integration Timeline

Tasks	RTC Year 1			RTC Year 2												
	2004			2005												
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Collaborate with Transforming Futures and PIP project staff	█	█					█				█			█		█
Identify and convene youth and family advisory group members	█	█				█					█			█		
Prepare Human Subjects application	█	█														
Recruit and train youth and family member research assistants	█	█	█	█												
Identify sites for recruitment of participants		█	█	█												
Identify sites for focus groups		█	█	█												
Make arrangements for focus groups			█	█	█											
Conduct focus groups				█	█	█	█	█								
Analyze focus group data						█	█	█	█	█	█					
Share findings with Transforming Futures and PIP projects									█	█	█	█				
Prepare report of focus group findings											█	█	█			
Disseminate findings											█	█	█	█	█	█